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COLUMBIA UNIVERSITY

A HISTORY

Alumni Edition

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No. 81

GENERAL VIEW OF COLUMBIA UNIVERSITY

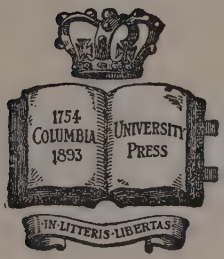
Taken in 1898

A HISTORY OF

COLUMBIA UNIVERSITY

1754-1904

PUBLISHED IN COMMEMORATION OF THE ONE HUNDRED AND FIFTIETH ANNIVERSARY OF THE FOUNDING OF KING'S COLLEGE



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Columbia revered,
By our forefathers reared
With love and pride;
Mother of Truth and Right,
Forever may thy light
Guide us, thy sons, aright,
Where'er we bide.

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PREFATORY NOTE

It is now nearly three score years since Nathaniel F. Moore prepared "An Historical Sketch of Columbia College," which was published in 1846 while its author was President. A revision of Dr. Moore's history, undertaken by Professor Van Amringe and published in 1876, continued the annals of the College down to the earlier years of the administration of President Barnard. To an elaborate work of reference, entitled "American Universities and their Sons," published in 1898, Professor Van Amringe contributed a history of Columbia, from its foundation as King's College to its removal to Morningside Heights; and numerous historical articles have from time to time been published by George H. Moore, John MacMullen, John B. Pine, and others. It has seemed to the Trustees of the Columbia University Press, however, that a more comprehensive work was needed, and that such a work would most appropriately commemorate the one hundred and fiftieth anniversary of the founding of the College. They have accordingly appointed a subcommittee to take charge of the publication of a history of the University, which shall record the successive phases of its expansion and trace the development of each of its component schools and colleges. For this volume Dean Van Amringe has revised and continued his account

of the undergraduate College, now reëstablished as an independent school in the larger University which has grown out of it. Other members of the teaching and administrative staff have undertaken to set forth the history of the other schools and of the several colleges which have been incorporated in the University. How successfully they have accomplished this object the following pages bear witness, and the Editorial Committee takes this occasion to express its grateful appreciation to the writers who have made possible the publication of this narrative.

BRANDER MATTHEWS, *Chairman.*
JOHN B. PINE.
HARRY THURSTON PECK.
MUNROE SMITH.
FREDERICK P. KEPPEL, *Secretary.*

COLUMBIA UNIVERSITY,
IN THE CITY OF NEW YORK,
Commencement Day,
June 8, 1904.

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A HISTORY OF COLUMBIA UNIVERSITY

BOOK ONE

KING'S COLLEGE AND COLUMBIA COLLEGE

CHAPTER I

1702–1754

THE FOUNDING OF KING'S COLLEGE

On the thirty-first day of October, 1754, George II, King of England, created by letters patent "a Body politick and Corporate, in deed, fact, and name," "the Governors of the College of the Province of New York, in the City of New York, in America," and ordained that, certain designated lands having been first conveyed and assured to the corporation, "there be erected and made on the said Lands a College, and other Buildings and Improvements, for the use and convenience of the same, which shall be called and known by the name of King's College, for the Instruction and Education of youth in the Learned Languages, and Liberal Arts and Sciences."

It is difficult to determine at what period the design of establishing a College in New York was first seriously entertained. The Colony was settled under the auspices of a trading company, and attracted, at first and for a considerable time, settlers who were chiefly intent upon the pursuit of gain.

1702 "The English who, on the transfer of the province in 1674, came in were for the most part as indifferent to learning as the Dutch had been; and even sixty-seven years afterwards there were, in all the province, to be found but ten men who had received a collegiate education. The Huguenots, and the Germans of the Palatinate, who fled hither from religious persecution were men who might, like our eastern brethren, have turned their thoughts to the foundation of a seat of learning, but their comparatively small number, and the difference of language, made them, for a long time, strangers, as it were, in the land which afforded them a refuge. This diversity of language — for Dutch, English, French, and German were all spoken in the province — and a corresponding difference of religion, either as to doctrine or external forms, were no doubt among the causes which so long retarded the establishment of a College in New York. For a College was, by our ancestors, rightly regarded as a religious, no less than a scientific and literary, institution; and they may have found it hard to combine the heterogeneous elements of their social system in any harmonious action on a subject of such near concernment."[1]

The earliest suggestion of, and manifestation of an intent to found, a College appear to be contained in a letter written, in 1702, to the Secretary of the Society for the Propagation of the Gospel in Foreign Parts, by Lewis Morris, Governor of the Province of New Jersey, and in the minutes of the Vestry of Trinity Church. Governor Morris wrote: "The Queen has a Farm of about 32 Acres of Land, wch Rents for £36 p. Ann: Tho the Church Wardens & Vestry have petitioned for it & my Ld four months since gave ym a promise of it the proceeding has been so slow that they begin to fear the Success wont answer to the expectation. I believe her Maty. would readily grant it to the Society for the asking. N. York is the Center of English America & a Proper Place for a Colledge,— & that Farm in a little time will be of considerable Value, & it's pity such a thing should be lost for

[1] President Moore's *Historical Sketch.*

want of asking, wch at another time wont be so Easily obtained." 1746

The petition of the Church Wardens and Vestrymen of Trinity Church referred to was successful, and, in 1702 or 1703, the farm was deeded or leased to the church. In the minutes of the Vestry for February 19, 1703, appears the following entry: "It being moved which way the King's Farm which is now vested in Trinity Church should be let to farm. It was unanimously agreed that the Rector & Church Wardens should wait upon my Lord Cornbury, the Govr., to know what part thereof his Lordp did design towards the Colledge which his Lordp designs to have built & thereupon to publish Placards for the letting thereof at the public outcry to the highest bidder." The records unfortunately fail to disclose Lord Cornbury's intention.

Early in 1729 Bishop Berkeley, then Dean of Derry, arrived in this country on his way from England to Bermuda to establish a College. He landed at Newport, Rhode Island, and there took up a temporary residence. Not long after his arrival he conceived that he had made a mistake in fixing upon Bermuda as the place for his College. "He then wrote to his friends in England, requesting them to get the patent altered for some place on the American continent, which would, probably, have been New York; and to obtain the payment of the sum that had been granted him."[1]

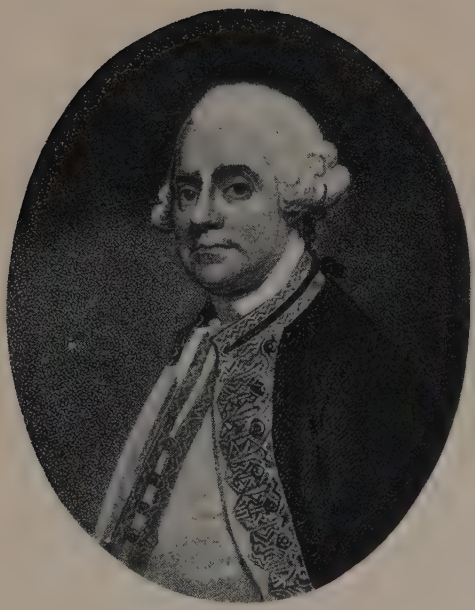
Nothing came of this proposition and no further mention is made of the subject until 1746, when an Act was passed by the General Assembly of New York "for raising the sum of £2250 by a Public Lottery for this Colony, & for the advancement of Learning & towards the Founding of a College within the same." The Act — premising, "Inasmuch as it will greatly tend to the welfare and reputation of the Colony that a proper and ample foundation

[1] Chandler's *Life of Johnson.*

1751 be laid for the regular education of youth, and as so good and laudable a design must readily excite the inhabitants of this Colony to become adventurers in a lottery of which the profits shall be employed for the foundation of a Colledge for that purpose," — made the necessary provisions for a lottery. Similar laws followed, and, in 1751, the several sums raised by the lotteries, amounting in all to £3443 18*s.* were, by the Legislature, vested in Trustees, who were authorized to receive proposals "from any of the Cities or Counties within this Colony which shall be desirous of having the said College erected within their said Cities, or Counties, touching the placing or fixing the same therein respectively." Soon after the Trustees were appointed, Trinity Church proposed to deed to them "any reasonable quantity of the Church farm (which was not let out) for erecting and use of a College." This proposal, which had apparently been in view by the Church from the time of its acquiring "the King's Farm," had doubtless a controlling influence in the selection of New York City as the site of the College.

On the 4th of July, 1753, the assembly passed a supplementary act authorizing and directing the Treasurer of the Colony, for the time being, to pay to the Trustees "out of the monies arising by the Duty of Excise, the annual Sum of five hundred pounds, for and during the Term of Seven Years, to commence from and after the First Day of January now next ensuing;" this annuity to be apportioned and distributed in salaries.

The Trustees named in the Act of 1751 were, "the eldest Councellor residing in this Colony, the Speaker of the General Assembly, and the Judges of the Supreme Court, the Mayor of the City of New York, the Treasurer of this Colony, for the Time being, together with James Livingston, Esq., Mr. Benjamin Nicoll and Mr. William Livingston." The fact that two-thirds of the Trustees appointed were in communion with the Church of England, and that



SIR CHARLES HARDY, KNIGHT

Governor of the Province of New York, 1755–1757
Chairman *ex officio* of the Governors of King's College, 1755–1757

some of these were also vestrymen of Trinity Church, 1753
excited strong opposition to the scheme. Mr. William Livingston was especially prominent as an opponent of the intended College. In accounts of the controversy he is spoken of as a Presbyterian. He himself, however, in his preface to essays which he published under the signature of *The Independent Reflector*, refers to the dispute between the friends and the foes of the College, to "the rancour that appear'd against the Presbyterians," and says: —

"Upon reading all this fiery rage, that was so plentifully vomited against whole congregations of christians; the following questions will naturally occur to the unprejudiced reader: — what provocation was given? Was the 'Reflector' a Presbyterian? Or if he was, had all the people of that persuasion deputed him, as their head and vicegerent? Did he defend presbyterianism to the confusion of high church? The provocation that was given, is hitherto amongst the arcana of nature. The 'Reflector' has declared himself attached to no denomination; and expressly wrote against Presbyterians. The Moravians he has as expressly vindicated against the aspersions of their enemies; by which he has spoiled above fifty sermons, that might otherwise have been ended as they were begun, with sense and moderation. And for thy farther satisfaction, courteous Reader, he declares that he neither is, nor ever was, attached to presbyterianism. To the trumperies of human, artificial, political & corporeal religions, he is still less addicted: He hopes himself in short to be, what no high-church man as such ever was, nor from the nature of the thing can possibly be; a christian. A party that wants no establishment for its support; but ever flourished most, when it had establishments to encounter; & ever decayed and languished, when by the secular arm, vindicated and aggrandized."[1]

It is evident from the tone of the preceding extract that the contest for and against the College became a very angry one. It was largely of a religious character, and

[1] Preface to *The Independent Reflector*, 1753.

1753 Mr. Livingston and his associates seemed to fear a church establishment.

"Whatever others may in their Lethargy & Supineness think of the Project of a Party College I am convinced, that under the Management of any particular Persuasion, it will necessarily prove destructive to the civil and religious Rights of the People: And should any future House of Representatives become generally infected with the Maxims of the College, nothing less can be expected than an Establishment of one Denomination above all others, who may, perhaps, at the good Pleasure of their Superiors, be most graciously favoured with a bare Liberty of Conscience, while they faithfully continue their annual Contributions, their Tythes & their Peter-Pence."[1]

Opposition was made to the procurement of a Royal Charter.

"The Mutability of its Nature will incline every reasonable Man, to prefer to it that Kind of Government, which is both productive of the richest Blessings, and renders its Advantages the more precious by their superior Stability. A Charter can at best present us with a Prospect of what we are scarce sure of enjoying a Day." "That a specious Charter will be drawn, & exhibited to public View, I sincerely believe: A Trick of that kind will unquestionably be made Use of, to amuse the unattentive Eye, and allure the unwary Mind into an easy Compliance. But it will be only *Latet Anguis in Herba*, & when a copious Fund is once obtained, a surrender of the Charter may make Way for a new One, which tho' sufficiently glaring, to detect the Cheat, will only leave us Room to repent of our Credulity."[2]

Establishment by Act of Assembly was urged in preference.

"By this Means that Spirit of Freedom, which I have in my former Papers, shown to be necessary to the Increase of Learning, & its consequential Advantages, may be rendered impregnable to all attacks. While the Gov-

[1] *The Independent Reflector*, Number xviii, March 29, 1753.
[2] *Ibid.*, Number xix.

ernment of the College is in the Hands of the People, or 1754
their Guardians, its Design can not be perverted." "But what remarkably sets an Act of Assembly in a Light far superior to a Charter, is that we may thereby effectually counterplot every scheme that can possibly be concerted, for the Advancement of any particular Sect above the rest."[1]

The violent controversy delayed the granting of the Charter, which was, however, finally passed, as before stated, October 31, 1754. Under date of "Monday, 10 o'clock, November 4, 1754," the Rev. Henry Barclay, Rector of Trinity Church, New York, wrote to the intended President of the College: —

"On Thursday last the Charter passed the Governor and Council, and was ordered to be forthwith engrossed. On Friday, the Trustees appointed by Act of Assembly, according to order of the House, delivered in a report of their proceedings conformable to the Act, which report was signed by all but William Livingston, who objected to the report as not being complete, because no notice was taken of the proceedings with regard to the Charter, which the Governor and the rest of the gentlemen thought unnecessary. Whereupon Livingston delivered in a separate report in full, containing his famous Protest, etc. This occasioned a great ferment in the House, and issued for that day in a resolve that Livingston's Report should be printed at large, and the affair postponed to farther consideration on Wednesday next. They had a majority of fourteen to eight, but three of our friends were absent, and it was with much difficulty that they were prevented from censuring the conduct of the Trustees and returning thanks to Livingston. We were all afraid that this would have retarded the Sealing of the Charter, and some well wishers to the thing would have consented to the retarding of it, had not the Governor appeared resolute and come to town on Saturday and fixed the Seal to it; and to do him justice, he has given us a good majority of Churchmen, no less than eleven of the Vestry being of the number. There are but eight of the Dutch Church,

[1] *The Independent Reflector*, Number xx.

1754 most of them good men and true, and two Dissenters. We are, however, puzzled what to advise you as to resigning your mission. I have been with Mr. Chambers this morning, and though it be the opinion of most of the gentlemen that you ought to resign and trust to Providence for the issue of things and come away immediately, yet we would rather choose, if possible, that you should put off the resignation for a fortnight or three weeks, and come down immediately, because some are not so clear with regard to the £500 support, though others think we cannot be deprived of it. But since this conversation with Mr. Chambers we have had some glimmering light. I went from Mr. Chambers' to Mr. Watts' (who is unhappily confined with rheumatism), and met two Dutch members coming out of his house, who, as he told me, came to make proposals for an accommodation, and all they desired was a Dutch Professor of Divinity, which, if granted, they would all join us, and give the money. This I doubt not will be done unless the Governor should oppose it, who is much incensed at the Dutch for petitioning the Assembly on that head, but I make no doubt but he may be pacified. . . . I have not time to give you a list of the Governors, nor indeed can I recollect them all. The whole number is forty-one: seventeen *ex officio* and twenty-four private gentlemen, in which number there are at present but eight of the Dutch Church, the French, Lutheran, Presbyterian Ministers, and Will. Livingston, — so that we have a majority of twenty-nine to twelve, and in these twelve are included Mr. Richards, John Cruger, Leonard Lispenard, and the Treasurer, all our good friends."[1]

The granting of the Charter did not silence the opposition but turned it in another direction. Vigorous attempts were made to prevent a transference to the Governors named in the Charter of the money raised for the endowment of a College, and to establish by Act of the Assembly, a "New York College," in place of, or in distinction to, a "Trinity Church College," as, to discredit it, King's College was styled. The feeling of oppo-

[1] Beardsley's *Life of Johnson*.

sition and resentment that was still active is indicated by 1755
the following card published in the *New York Gazette or Weekly Post Boy*, No. 652, July 28, 1755:—

"Whereas it has been reported to the Reproach and Prejudice of David Jones, Esq., Speaker of the General Assembly, That he used his Endeavours, for the obtaining the Charter for establishing the College, with the exclusion of all Professions (but those of the Church of England) from being President; These may serve to show, that we have had great opportunities to know his Sentiments in this Affair, and never have observed or discovered, in any one Instance, his Application or Inclination, for having the Charter in the Form and Manner it now is, touching the Limitation aforesaid; but, on the Contrary, have often seen him shew his dislike thereto, and heard him declare his Opinion against it.

"Wm. Walton,
"Eleazer Miller.
"Wm. Nicoll
"Johannes Lott
"Pieter Winne
"Tho. Cornell.

"New York, July 5, 1755."

Advantage was taken of the arrival, in the fall of 1755, of a new Governor-General, Sir Charles Hardy, to present to him an inflammatory address, in the hope of securing his influence against the College. "But Sir Charles received it with coldness and treated it as it deserved. On the other hand, he received the address of the Governors of the College, presented by the President, with the greatest respect and politeness. He signified that he was desirous of seeing their subscription paper; and the next day when it was brought to him, he generously subscribed, without any solicitations, £500 for the College. This was such a disappointment and mortification to its opposers, that from that time they were silent, and gave no further molestation. Not long after the Board of Governors, who had an equitable and just right

1755 to the whole of the money raised by lottery, for the sake of peace, agreed with the Assembly that it should be equally divided between the College and the public."[1] The Act of Assembly referred to in the foregoing sentence was the Act passed December 1, 1756. It provided: (*a*) "That the one full and equal Moiety, or Half-part of said Monies" should be vested in the Governors of the College to be by them disposed of in their discretion, "for the Advancement of Learning in the said College." (The College received £3202.) (*b*) "That the other full and equal Moiety, or Half-part of said Monies" should be employed — first, to provide, in or nigh the City of New York, "a proper Pest-House for the Reception of such Persons as may be infected with any contagious Distempers"; and second, "for the erecting a new publick Gaol in the City of New York, in Lieu of that which is now in the City-Hall of the said City." (*c*) That £500 out of the Excise Moneys should be annually paid to the Trustees, as provided in the Act of July 4, 1753.

Though the Charter was passed in October, 1754, its delivery was delayed, "the clamour was so great," till May 7, 1755, at which time a majority of the Governors qualified by taking the oath required of them by law. At this, the first meeting of the Governors, was unanimously adopted the proposal of the Rev. Joannes Ritzema, Senior Minister of the Reformed Protestant Dutch Church, one of the Governors named in the Charter, asking for an additional Charter. Such additional Charter was granted and delivered to the Governors at a meeting held the 3d of June following, providing: "That the Dutch shall here enjoy the Liberty of their Conscience in Divine Worship and Church Discipline, . . . there may and shall be in the said College, a Professor of Divinity of the Reformed Protestant Dutch Church, for the Instruction

[1] Chandler's *Life of Johnson.*

of such Youth as may intend to devote themselves to the 1755
sacred Ministry in those Churches, in this Our Province of New York, . . . such Professor shall be from Time to Time, and at all Times hereafter, nominated, chosen and appointed by the Ministers, Elders and Deacons of the Reformed Protestant Dutch Church, in the City of New York, for the Time being, when they shall see fit to make such Nomination, Choice and Appointment, . . . provided always, such Professor, so to be chosen from Time to Time by them, be a Member of, and in Communion with, the said Reformed Protestant Dutch Church." The "Ministers, Elders and Deacons" seem to have been satisfied with the grant of an authority which they never exercised.

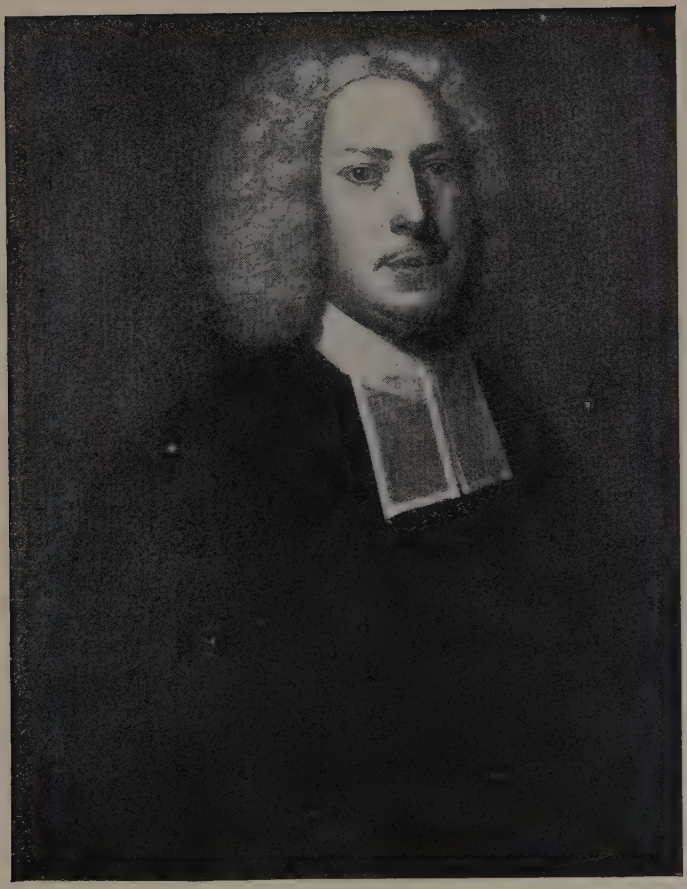
At a meeting of the Governors of the College held on the 13th of May, 1755, the corporation of Trinity Church conveyed to them in fee "for & in consideration of the sum of ten shillings" "all that certain piece or parcell of ground situate, lying & being on the West side of the Broadway in the West ward of the City of New York fronting easterly to Church Street between Barclay street and Murray street four hundred and forty foot and from thence running westerly between and along the said Barclay street and Murray street to the North River." It is more than probable that the streets named in the conveyance were then merely projected and were not laid out till some years afterwards.

The "express condition" of the grant was that "the President of the said College forever for the time being shall be Member of and in communion with the Church of England as by law established & that the Morning and Evening Service in the said College be the Liturgy of the said Church, or such a Collection of Prayers out of the said Liturgy with a Collect peculiar for the said College as shall be agreed upon & approved of by the President and Governors of the said College." This condition is

1754 said to have been imposed because of a fear on the part of the Vestry of Trinity Church that the College might otherwise have no religious character whatever.

Among the papers issued during the controversy about the College was one entitled "A brief Vindication of the Proceedings of the Trustees relating to The College. . . . By an Impartial Hand," and sold by H. Gaine in 1754. The "Impartial Hand" was that of Benjamin Nicoll, a lawyer of distinction in New York, one of the Trustees named in the act of 1751, subsequently named in the Charter as one of the Governors of the College, a Vestryman of Trinity Church, and stepson of the Rev. Dr. Johnson, first President of King's College. In this, after mentioning the appointment of Trustees in 1751 and the violent attacks made upon them and the intended College, the writer says :—

"Soon after, the Trustees above mentioned, took upon them the Burthen of their Office, the Rector, Church-Wardens and Vestry of Trinity Church, being willing to promote the laudable Design of establishing a College among us, made an Offer of some of their lands for that Purpose, which generous Offer, the Trustees thought worthy of Thanks; and accordingly the Chief-Justice, in their Name, thanked them for it; the Place being esteemed by all the Trustees, as the most convenient for the Purpose in the whole Government. . . . The 'Independent Reflector,' it seems, collecting from this Proposal of the Rector, Church-Wardens and Vestry, that it was very probable, as they were churchmen, and believed something of the Christian Religion, they would endeavour that something of *that* should be taught Youth, in the Course of their Education at College; . . . loudly sounded in our Ears, the terrible Dangers, the Subjects of this Province were in, from the growing power of the Church, though he all along insisted, there were ten to one against it in the Government; so inconsistent was that Author. . . . But *Mr. Reflector*, not content with this, with the air of a Dictator, proceeded to lay down Rules and Instructions for the Establishing the College in



SAMUEL JOHNSON, S.T.D. (Oxon.)

President, 1754–1763

this Province ; and among others, insisted, that as there 1754
were different Sects of Christians among us, Therefore, in order to give every sect an equal Interest in the College, no Religion should be taught in it ; and no Form of Prayer used, but such as was appointed by the Legislature. . . . The Members of the Vestry of *Trinity Church* (who, as several of them assured me, *at first thought of no such Thing*[1]) finding with what Warmth and unbecoming Zeal, they were attacked, and that this Writer was not only stiring up all the other Sects of Christians against them but also was endeavouring entirely to banish Religion from the College as much as in him lay : They then thought it their Duty, as Christians, and in Justice to their Constituents, to take at least some care, that they did not part with the Lands they were intrusted with, unless for the Interest of Religion ; and therefore, I must say, I think wisely, came to this Resolution, viz : That they would not part with their Lands, but upon the conditions since mentioned in the Charter. The Vestry of the Church (as one of the Trustees, whose Veracity I can depend upon, assures me) acquainted the Trustees with this Resolution. Thus I have stated the Fact, as to this Transaction of the Members of the Vestry of *Trinity Church*, as the same truly happened ; and are the only steps that I have heard, or is pretended, have been taken by them, in order to obtain a Charter ; and thus much I thought necessary to relate, that it might clearly appear, how far they are to blame, and whether there was any Reason to sound the Trumpet against the Church, whatever there may be against a few particular Members of it."

The stipulations alluded to were, after the Revolution, eliminated from the Charter, but they still remain the condition of the deed of gift from Trinity Church.

[1] These words are not italicized in the original.

CHAPTER II

1754–1763

PRESIDENT SAMUEL JOHNSON

The Act of 1751 gave no authority to the Trustees therein named other than to put at interest the sum already raised, to receive additional contributions and donations, and to receive proposals as to the location of the College. The Act of July 4, 1753, appropriated an annual sum of money for the payment of instructors and authorized the Trustees to engage suitable masters. Accordingly, on the 22d of November, 1753, "the Trustees wrote to Dr. Johnson, of Stratford, a Minister of the Church of *England*, known to be well qualified for the Education of Youth ; and Mr. Whittelsey, of *New Haven*, a Presbyterian Gentleman, late a Tutor of Reputation, in the College there, to undertake the Business of Masters in the intended Seminary." Mr. Whittelsey was unable to accept for want of health.

The Rev. Dr. Samuel Johnson listened favorably to their proposals. He was one of the notable men of his time in America. He was born in Guilford, Connecticut, in 1696, was graduated from the College at Saybrooke, now Yale University, and was subsequently a tutor there for three years. He then settled in West Haven, which was then a part of New Haven, as a Congregational minister. In the course of his studies he was led to doubt the validity of his ordination as a minister. He finally became convinced that the true ordination was the Episcopal ordination, went to England, and took orders as a minister of the Church of England. He then returned

to this country as a missionary of the Society for the 1754
Propagation of the Gospel in Foreign Parts, and settled at Stratford, Connecticut, in 1723. His position was a very difficult and trying one. He was at the time the only minister of his faith in Connecticut and was subjected to misrepresentation and constant attack. The dignity of his character, his extensive acquirements, his devotion to the interests of religion and learning, his equable and benevolent temper, his unfailing courtesy and fairness, the representative position to which he soon attained by his relations with distinguished men of the Church in England and their confidence in him, and his acquaintance with men of learning and standing at home, won the trust and affection of his neighbors and caused him to be generally looked upon with the highest respect and regard. The University of Oxford, England, recognized his learning and labors by conferring upon him, in 1743, the degree of Doctor of Divinity. His reputation for sound judgment and scholarship, moral worth and piety without bigotry, became extended. When the College at Philadelphia, now the University of Pennsylvania, was projected in 1749, he was solicited to take charge of it. The eminent Benjamin Franklin was especially urgent and visited him at Stratford to induce him to do so. "The Doctor [Johnson] had composed a compendium of Logic, including Metaphysics, and another of Ethics, for the better instruction of his two sons in those studies. These were printed together in an octavo volume in 1752, by Mr. Franklin, in Philadelphia, for the use of the College in that city then about to be erected, and of which Mr. Franklin, so justly celebrated throughout the learned world for his discoveries and improvements in electricity, was one of the most active promoters. On that occasion he frequently corresponded with Dr. Johnson, whom he esteemed one of the best judges of such matters in the country. He consulted him about the plan of education for the College,

1754 and urged him to undertake the Presidency of it; which proposal, although it was in many respects agreeable to the Doctor, he finally declined."[1]

When he was invited, in 1753, to take charge of the intended College in New York, he hesitated long about it, but finally came to New York, by way of trial only, in April, 1754. He would not, however, positively accept the Presidency till after the passage of the Charter and the consequent determination of the conditions under which the College should proceed.

Preparations were, however, made for the examination and admission of students, and in the *New York Gazette or Weekly Post Boy* of June, 3, 1754, No. 592, appeared an "Advertisement — To such parents as have now (or expect to have) children prepared to be educated in the College of New York," that it is proposed to begin tuition upon the first day of July next.[2]

This prospectus of the new undertaking therein set forth is certainly liberal in spirit, and, for the time and under the circumstances, remarkably so. There appears to be nothing in it that could be rightly interpreted to justify the claim that the College would be conducted in a narrow spirit and for the especial advantage of members of a particular communion. The Charter indeed expressly prohibited the making of any law, ordinance or order that should "extend to exclude any person of any Religious Denomination whatever from Equal Liberty and advantage of Education, or from any the Degrees, Liberties, Priviledges, Benefits, or Immunities of the said College, on account of his particular Tenets in matters of Religion." It furthermore was so drawn as to embrace in the Board of Governors, besides other *ex officio* Representatives, not only the Rector of Trinity Church in the city of New York, but also the senior minister of the

[1] Chandler's *Life of Johnson.* [2] See Appendix A.

Reformed Protestant Dutch Church in the city of New 1754
York, the minister of the Ancient Lutheran Church in the city of New York, the minister of the French Church in the city of New York, and the minister of the Presbyterian Congregation in the city of New York. It is perhaps due to this circumstance that Columbia, almost alone of all the pre-Revolutionary Colleges in the United States, has never had a theological Faculty connected with it. The Charter so framed is singularly eloquent of the cosmopolitan character of New York even at that early day. The governing body of the College has never lost this cosmopolitan character.

In the *New York Gazette or Weekly Post Boy* of July 1, 1754, No. 596, appeared the following notice : —

"This is to acquaint whom it may concern that I shall attend at the Vestry Room in the School House, near the English Church, on Tuesdays and Thursdays every week, between the Hours of Nine and Twelve, to examine such as offer themselves to be admitted into the College.

"Samuel Johnson."

At the examinations here provided for, eight candidates were admitted, viz.: Samuel Verplanck, Rudolph Ritzema, Philip Van Cortlandt, Robert Bayard, Samuel Provoost, Thomas Marston, Henry Cruger, and Joshua Bloomer. In the Matricula of the College it is recorded of Robert Bayard that "after about 2 years he went into the army"; of Thomas Marston, that "after about 2 years he went to merchandize"; and of Henry Cruger, that "after about 3 years, he went to England." It is further recorded that "Samuel Martin was admitted to the 2d year and after about 2 years he went to England to study Physic."

It may be of interest to note, in passing, that Henry Cruger, who "went to England," became a successful merchant in Bristol, rose to distinction in political life, and, with Edmund Burke, was chosen, in 1774, to represent the city of Bristol in the English House of Commons.

1754 "Burke, Cruger, and Liberty" constituted the watchwords of the popular party at the time of the election. In Parliament, he attracted attention by his ability as an orator. On the occasion of his maiden speech, Flood, the Irish orator, asked, "Who is that? who is that? a young speaker — whoever he is, he speaks more eloquently than any man I have yet heard in the House." He boldly defended his countrymen and supported their cause. He lost his seat in the election of 1780, "because of his *attachment* to the *Americans* during the war." He was, however, subsequently returned, and remained a member until his removal to New York City in 1790. At the first senatorial election in New York after his return to this country, he was chosen a member of the Senate of the State. He died full of years and honor in April, 1827.[1]

On the 17th of July, 1754, Dr. Johnson, who constituted in himself the entire Faculty, began, in the Vestry Room of the Schoolhouse of Trinity Church, the instruction of the first class of what was soon to be King's College, and later Columbia University in the city of New York.

In the course of the year, the Charter was, as before noted, passed. Dr. Johnson was named in it as President; and the conditions of the Charter being, upon the whole, satisfactory to him, he accepted the office. His salary from the College was but £250, and, to make better provision for him, the Vestry of Trinity Church appointed him an assistant minister with a stipend of £150.

On the admission of a second class in 1755, an assistant to the President in instruction was provided in the person of his son, William, Master of Arts of Yale College, who became fellow or assistant tutor. Father and son to-

[1] Address of Henry C. Van Schaack before the New York Historical Society, January 4, 1859.

gether conducted all the exercises of the College, to the 1755
evident satisfaction of the Governors. In the "New York Gazette" of September 1, 1755, No. 657, appeared the following item of news: —

"Last Monday, the Trustees of the NEW YORK COLLEGE, visited and examined the Pupils, belonging to that Seminary, under the Care of the Revd. Dr. Johnson, and were mighty well pleased with the Proficiency they had made both in their *Latin* and *Greek* studies."

The Governors of the College, at a meeting held the 3d of June, 1755, adopted the device prepared by Dr. Johnson for the seal of King's College, which continues to be that of Columbia College with the necessary alteration of name. The description here given is taken from the minutes: —

"THE DEVICE OF THE COLLEGE SEAL. — The College is represented by a Lady sitting in a Throne or Chair of State, with Severall Children at her knees to represent the Pupils, with I Peter II, 1, 2, 7v., under them to express the Temper with which they should apply Themselves to seek True Wisdom. The words are, Wherefore laying aside all Malice and all Guile, and Hypocrisies and Envies and Evil Speakings as New-born Babes desire the Sincere Milk of the Word that ye may grow thereby &c. One of them She takes by the hand with her left hand expressing her benevolent design of Conducting them to True Wisdom and Virtue. To which purpose She holds open to them a Book in her right hand in which is [in] Greek letters ΛΟΓΙΑ ΖΩΝΤΑ, the living or lively Oracles, which is the Epithet that St. Stephen gives to the Holy Scriptures — Acts 7 : 38. Out of her Mouth over her left Shoulder, goes a label with these words in Hebrew Letters ORI–EL– God is my Light; alluding to Ps. 27 : 1, expressing her Acknowledgment of God the Father of Lights, as the Fountain of all that Light, both Natural and Revealed, with which She proposes to inlighten or instruct her Children or Pupils; whereof the Sun rising under the Label is the Emblem or Hieroglyphic, alluding to that expression Mal. IV., 2. The Sun of Righteousness arising with healing in his Wings.

1756 Over her head is Jehovah in a Glory, the Beams coming triangularly to a Point near her head, with these words around her for her Motto, IN LUMINE TUO VIDEBIMUS LUMEN — *In thy light shall we see light.*— Psal. 36 : 9. On the Edge around are engraved in Capitals, SIGILLUM COLLEGII REG. NOV. EBOR. IN AMERICA — *The Seal of King's College at New York in America.*"

In a list of the "Benefactors to King's College" it is stated that "Mr. George Harison presented us with the Engraving of the Seal which cost 10 Guineas."

In the summer of 1756 the funds of the institution were in such a condition that the Governors thought themselves justified in providing for the erection of a College building. Accordingly plans were prepared, submitted to the Governor-General, and, on his approval, were adopted by the Governors, July 13, 1756. On the 23d of August the cornerstone was laid. The following account of the ceremony appeared in the *New York Gazette* of August 30, 1756, No. 711 : —

"Last Monday was laid, by his Excellency Sir Charles Hardy, our Governor, the first stone of King's College, in this City. On which Occasion the Honourable James De Lancey, Esq., our Lieutenant-Governor, the Tutor, with the students, met at Mr. *Willett's*, and thence proceeded to the House of Mr. *Vandenbergh*, at the *Common*. Whither his Excellency came in his Chariot, and proceeded with them about One o'Clock to the College Ground, near the River on the North-West Side of the City, where a Stone was prepared, with the following Inscription.

. . . . . .

[The Latin inscription is here given.]

"*In English thus*

"This first Stone of this College, called KING'S, established by Royal Charter, for the Honour of Almighty GOD, and the Advancement of the public Good, both in Church and State, was laid by his Excellency Sir CHARLES HARDY Knight, the very Worthy Governor of this Province, August 23d, An. Dom. 1756.

"After the Stone was laid, a Health was drank to his 1756
Majesty, and Success to his Arms, and to Sir CHARLES, and Prosperity to the College, and to the Advancement of true Religion, Loyalty and Learning, under his Administration; Upon which the Reverend Dr. *Johnson*, President of the College, made the following short congratulatory speech in Latin.

. . . . . .

[Here are given the Latin speech and a translation of it into English.]

"Which being done, the Governors and Pupils laid each his Stone, and several other Gentlemen, and then they returned to Mr. *Willett's:* where there was a very elegant Dinner, after which all the usual loyal Healths were drank, and Prosperity to the College; and the whole was conducted with the utmost Decency and Propriety."

The Latin inscription on the stone is not quite accurately quoted in the *Gazette*, and is here given correctly. The original stone may be seen embedded in the mantel-piece of the Trustees' Room in the Library Building at Morningside Heights.

HVJVS COLLEGII, REGALIS DICTI, REGIO DIPLOMATE CONSTITVTI IN HONOREM DEI O.M. ATQ: IN ECCLESIÆ REIQ: PVBLICÆ EMOLVMENTVM, PRIMVM HVNC LAPIDEM POSVIT VIR PRÆCEL LENTISSIMVS, CAROLVS HARDY, EQVES AVRATVS, HVJVS PROVINCIÆ PRÆFECTVS DIGNISSIMVS. AVGTI. DIE 23° AN. DOM. MDCCLVI.

The "Tutor" referred to in the account was Mr. Leonard Cutting, of Pembroke Hall, Cambridge, England, who replaced Mr. William Johnson in 1756, the latter having gone to England to take orders in the Episcopal Church.

In November of the following year, 1757, the small-pox prevailed in New York, and President Johnson, who had accepted his office under the express condition "that he should be allowed to retire to some place of safety out of town when the small-pox prevailed," retired with his family to Westchester, where he remained more than a

1757 year. He left about thirty pupils in the then three classes, and as the tutor, Mr. Cutting, was unable to do them all justice, the Governors, on the 8th of November, appointed Mr. Daniel Treadwell, "a young gentleman of a very excellent character, educated at Harvard College, and recommended by Professor Winthrop as eminently qualified for that station," Professor of Mathematics and Natural History. This was the first professorship established in the College. "Soon after this, an apparatus of good mathematical and philosophical instruments was purchased; and the Rev. Dr. Bristowe, a worthy member of the society, lately deceased, having by his last will bequeathed his library, of near one thousand five hundred volumes, to the society to be sent to the College of New York, of which Dr. Johnson is President, or to such other place or places as the society shall direct, the society directed those books to be sent and placed in this College of New York, in approbation of the generous donor's design." [1]

Mr. Treadwell had begun his duties on November 1, under an engagement with the Committee of the Governors charged with the oversight of the College during Dr. Johnson's absence. The agreement made with him was "that the said Mr. Treadwell shall instruct the two senior classes in Mathematicks and Natural Phylosophy, and the youngest class in the Latin and Greek Languages, and that he shall receive from this Board the annual stipend of one hundred pounds current money of this Colony."

The College then, for the first time in its history, grew too large for its accommodations. The Vestry Room was assigned to Professor Treadwell; Mr. Cutting, the tutor, was obliged to take his classes in his own private lodgings, for which use of his rooms he was allowed at the rate of £10 per annum. At the same meeting at which this arrangement was made (November 8), as a mark of

[1] Chandler's *Life of Johnson.*

approval for his efficiency, the Governors increased Mr. 1758
Cutting's annual stipend from £80 to £100.

The absence of the President was prolonged till March, 1758. In the month of June following was held the first Commencement. It is stated in the Matricula that "The Commencement for graduating the first Class of Candidates, should have been on the second Wednesday in May, but for certain Reasons it was put off to the 21st day of June, 1758." The following were admitted Bachelors of Arts: Samuel Verplanck, Rudolph Ritzema, Philip Van Cortlandt, Samuel Provoost, Joshua Bloomer, Joseph Reade ("he had been educated at Philadelphia College"), Josiah Ogden and Isaac Ogden ("both had been educated in the Jersey College"). (Josiah Ogden had received the degree from the College of New Jersey in 1756, and his name is now recorded as an honorary graduate of King's or Columbia College.)

The following descriptive letter appeared in the *New York Mercury* of Monday, June 26, 1758, No. 306: —

"Mr. Printer, *Please to insert the following* in your next Paper. Wednesday last being the Day appointed by the Governors of King's College, in this City, for the Commencement, I had the Pleasure of being present at the first Solemnity of the Kind ever celebrated here; which was, thro' the whole, conducted with much Elegance and Propriety. The Order of the Procession from the Vestry Room, where the College is now held, to St. Georges Chappel, was as follows: The President, with his Honour the Lieutenant Governor, who, by his Presence graced the Solemnity, were preceded by the Candidates for Bachelor's and Master's Degrees, with their Heads uncovered, and were followed by the Governors of the College, the Clergy of all Denominations in this City, and other Gentlemen of Distinction of this and the neighbouring Provinces. After short Prayers suitable to the Occasion, the Reverend Dr. *Johnston*, the President, from the Pulpit, opened the Solemnity, with a learned and elegant *Oratio Inauguralis*. The exercises of the Bachelors were introduced by a polite salutory Oration, delivered by *Provoost*, with such Propriety

1758 of Pronunciation, and so engaging an Air, as justly gain'd him the Admiration and Applause of all present. This was followed by a metaphysical Thesis, learnedly defended by *Ritzema* against *Ver Planck* and *Cortlandt*, with another held by *Reed*, and opposed by two *Ogdens*. The Bachelors Exercises were closed by a well-composed, genteel English Oration, on the Advantages of a liberal Education, delivered by *Cortlandt*, whose fine Address added a Beauty to the Sentiment, which gave universal Satisfaction to that numerous Assembly. After this, Mr. *Treadwell*, in a clear and concise Manner, demonstrated the Revolution of the Earth round the Sun, both from astronomical Observations, and the Theory of Gravity, and defended the Thesis against Mr. *Cutting* and Mr. *Witmore*, a candidate for the Degree of Master of Arts. This Dispute being ended, the President descended from the Pulpit, and being seated in a chair, in a solemn Manner, conferred the Honours of the College upon those Pupils who were Candidates for a Bachelor's Degree, and on several Gentlemen who had received Degrees in other Colleges. The Exercises were concluded with a Valedictory Oration [in Latin] by Mr. *Cutting*, universally esteemed a masterly Performance. The President then address'd himself in a solemn pathetick Exhortation, to the Bachelors, which could not fail of answering the most valuable Purposes, and leaving a lasting Impression on the Minds of all the Pupils. The whole Solemnity being finished, by a short Prayer, the Procession returned back to the City-Arms, where an elegant Entertainment was provided by the Governors of the College. This important Occasion drew together a numerous Assembly of People of all Orders, and it gave me a sincere Pleasure to see the Exercises performed in a Manner, which must reflect Honour upon the College and incite every Friend of his Country, to promote so useful, so well regulated an Institution."

At the same Commencement, the degree of Master of Arts was conferred upon thirteen gentlemen who had been educated elsewhere.

There was no public Commencement for the class of 1759. Of the six candidates admitted in 1755, one "in his third year went to Philadelphia College," one "about the middle of his second year went into the army," one, "after

three years went to merchandize ;" one, " after three years 1760
went to nothing ; " one, " after about two years went to privateering." Epenetus Townsend alone of the six remained, and, without any ceremony, he " was admitted B.A. *pro Forma* and William Hanna was admitted by Diploma, bred at Jersey Col."

In October, 1759, Dr. Johnson was again driven away from the city by fear of the small-pox. He spent the winter with his son at Stratford, Connecticut. During his absence, Professor Treadwell and Mr. Cutting conducted the business of the College, under the general supervision of a Committee of the Governors. This winter of his absence was one of anxiety and sorrow to President Johnson. He left Mr. Treadwell, his " best Tutor," in declining health, and Mr. Cutting, therefore, overburdened with duty. Early in the spring of 1760 Mr. Treadwell died of consumption. At about the same time, in April, 1760, the College and the President met with another severe loss in the death of Benjamin Nicoll, stepson of the President, one of the wisest, most energetic, and influential members of the Board of Governors. " The whole city was in tears at his sudden and untimely death, at the age of forty-two ; the friends of the College seemed to be under a consternation ; but the blow was still more severe to Dr. Johnson himself. He was now almost ready to despond ; and when he returned to New York in May following, he found the scene so changed that the city appeared to him like a kind of wilderness. . . . On his return he endeavored to keep up his spirits as well as he could, by an indefatigable application to business, hoping to retrieve, in some measure, the damages the College had sustained during his absence. The building was so far completed that he removed into it, and commenced housekeeping, a little above forty years after he had first done the same in the College at New Haven." [1]

[1] Chandler's *Life of Johnson.*

1760 It is noted in the records that the College building was so far completed in May, 1760, that the officers and students "began to Lodge and Diet in it." In the month of June following, the first Commencement of the College from its own building was held. In an account of the exercises, the *New York Gazette or Weekly Post Boy*, of Monday, June 30, 1760, No. 912, says : —

"On Tuesday last, a publick commencement was held in this City. In the morning the College Hall was opened with a short and elegant Latin speech by the Rev. President; from whence the students and Candidates dressed in their Gowns, and uncovered, proceeded to St. George's Chapel, followed by the Governors of the College, and other Gentlemen." The account concludes with the statement that "The Audience on this Occasion was large and polite, and expressed a great satisfaction at the Order, Decency and Judiciousness, with which the whole was conducted."

In honor of George II and in accordance with the terms of the Charter, the building thus completed was called "King's College," and was surmounted by an iron crown, which is still preserved, a witness to its royal foundation. The Rev. Dr. Burnaby, an English traveller in the Province at that time, wrote of it : "The College when finished will be exceedingly handsome. It is to be built on three sides of a quadrangle fronting Hudson's or North River, and will be the most beautifully situated of any college, I believe, in the world. At present only one wing is finished, which is of stone, and consists of twenty-four sets of apartments, each having a large sitting-room with a study and bedchamber." President Myles Cooper described the College as it was in 1773 : "The College is situated on a dry gravelly soil, about one hundred and fifty yards from the bank of the Hudson River, which it overlooks ; commanding from the eminence on which it stands, a most extensive and beautiful prospect of the opposite shore and country of New Jersey, the City and

Island of New York, Long Island, Staten Island, New 1761
York Bay with its Islands, the Narrows, forming the mouth of the Harbor, etc., etc.; and being totally unencumbered by any adjacent buildings, and admitting the purest circulation of air from the river, and every other quarter, has the benefit of as agreeable and healthy a situation as can possibly be conceived." [1]

In March, 1761, Edward Willett was appointed steward. He was to have the use of two rooms and a kitchen in the College, and such part of the garden as the President might allow; he was to keep the students' rooms clean and have their beds made, and to provide for such as might choose to "diet with him" upon terms to be agreed upon. It was ordered "also the students Breakfast, Dine and Sup together in the College Hall, but that they be allowed no meat at their Suppers." The rent of rooms in the College building for students was fixed at £4 per annum. A committee, consisting of the Reverend Messrs. Barclay, Johnson and Auchmuty, and Mr. John Livingston, was appointed "to settle the Rates that the students are to pay for their Diet." The Committee established rules, which are here given: —

"Rules For Dieting the Students Belonging to King's College in New York

"*Weekly Rates for Dieting*

"For Breakfast, Dinner & Supper, 11*s.* a week; for Breakfast and Dinner, 8*s.* 3*d.* a week; for Dinner, 7*s.* a week; for Dinner and Supper, 8*s.* 3*d.* a week; for Breakfast, 3*s.* 8*d.* a week; for Supper, 3*s.* 8*d.* a week. To be paid Quarterly.

"*Bill of Fare for Every Day in the Week*

"Sunday, Roast Beef & Pudding; Monday, Leg Mutton, &c. and Roast Veal; Tuesday, Corn'd Beef & Mutton Chops; Wednesday, Pease Porridge & Beef Steaks; Thursday, Corn'd Beef, &c. and Mutton Pye; Friday, Leg Mutton and Soop;

[1] President Moore's *Sketch*.

1762 Saturday, Fish, fresh & salt, in their Season; Breakfast, Coffee or Tea, & Bread & Butter; Supper, Bread, Butter, & Cheese, or Milk, or the Remainder of the Dinner. Settled by the Governors of the College and ordered to be published."[1]

The vacancy occasioned by the death of Professor Treadwell was not supplied for more than a year, President Johnson and Mr. Cutting, with the assistance for a time of Mr. Samuel Giles as a mathematical teacher, conducting the whole of the instruction. In November, 1761, Mr. Robert Harpur, a graduate of the University of Glasgow, was chosen Professor of Mathematics and Natural Philosophy, much to the relief of the President and the efficiency of the College. In June, 1762, the last Commencement under the Presidency of Dr. Johnson was held. The President had for some two years been in correspondence with the Archbishop of Canterbury with regard to some suitable person to assist him in the instruction and government of the College and ultimately to succeed him as President. The person finally selected was the Rev. Myles Cooper, Master of Arts and Fellow of Queen's College, Oxford, a young man twenty-five years of age, "a Gentleman recommended by his Grace the Archbishop of Canterbury, for his distinguished Learning, firm Attachment to our happy Constitution, Probity, and amiable Character." On November 16, 1762, Mr. Cooper was introduced to the Board of Governors at their meeting, was elected a Fellow and Professor of Moral Philosophy and to assist the President of the College "in the Government thereof and the Education therein," at a salary of £150 sterling per annum, at 80 per cent exchange, "to commence from August 24 last" (the date of his setting sail from England). Dr. Johnson had not intended to resign the Presidency till after the next Com-

[1] Quoted from *The Origin and Early History of Columbia College*, by George H. Moore, LL.D., Superintendent of the Lenox Library, New York, 1890.

mencement in May, but the sudden death of his wife in 1763
February, 1763, led him to relinquish his office shortly thereafter and leave the city. On his retiring from the College, Dr. Johnson took up his residence with his son at Stratford, Connecticut, and resumed the charge of his mission there, which he had relinquished to serve King's College.

"Dr. Johnson continued, through the remainder of his life, to fill up his time in a manner worthy of his station and character. He pursued his studies with the same eagerness that animated his younger years. He kept up his correspondence with all his European friends that were still living, and was very punctual and faithful in answering their expectations in this way. His difficulty in writing occasioned him not to be so exact with his friends in *America*, who were better acquainted with his case, and could more easily excuse him. Yet when anything of real consequence was depending, he consulted not his own ease but would write as fully and particularly to them as the subject required. At the same time he was attentive to the business of his mission. He commonly read prayers and preached twice on every Sunday, and performed the ordinary parochial duties."

He died on the morning of January 6, 1772.

"Two days after, his remains were interred in the chancel of *Christ Church, Stratford*, where a handsome monument has been erected to his memory, with the following inscription, composed by a friend, who greatly loved and respected him.

"M. S.
Samuelis Johnson, D.D.
Collegii Regalis, Novi Eboraci,
Præsidis primi,
Et hujus *Ecclesiæ* nuper *Rectoris,*
Natus die 14to *Octob.* 1696,
Obiit 6to *Jan.* 1772.

"If decent dignity, and modest mien,
The cheerful heart, and countenance serene;
If pure *religion*, and unsullied *truth*,
His age's solace, and his search in youth;

If *piety*, in all the paths he trod,
Still rising vig'rous to his *Lord* and *God;*
If *charity*, through all the race he ran,
Still wishing well, and doing good to *man;*
If *learning*, free from pedantry and pride, —
If *faith* and *virtue*, walking side by side;
If well to mark his being's aim and end, —
To shine, through life, a *husband*, *father*, *friend;*
If *these* ambition in thy soul can raise,
Excite thy reverence, or demand thy praise;
Reader — ere yet thou quit this earthly scene,
Revere his name, and be what *he* has been.

"MYLES COOPER."[1]

[1] Chandler's *Life of Johnson.*

CHAPTER III

1754–1763

ENDOWMENT AND CURRICULUM

At one of the earliest meetings of the Board of Governors it was resolved to send addresses to the Archbishop of Canterbury and other friends of the College in England soliciting aid, and a committee was appointed to prepare them. It was not, however, till May, 1758, that such addresses were prepared and sent. In 1762 Dr. James Jay, who was going to England on business of his own, offered to take upon himself the task of soliciting and collecting subscriptions. His generous offer was accepted and he received the authority and instructions of the Governors for that purpose. On arriving in England he found Dr. William Smith engaged in the same enterprise for the College at Philadelphia, now the University of Pennsylvania. As the Archbishop of Canterbury, and others who were friendly to both Colleges, thought that an attempt to make separate collections might prove injurious, a united appeal was determined upon. Accordingly, letters patent were obtained from King George the Third, authorizing a collection. These letters set forth : —

"Whereas it hath been represented unto Us, upon the joint Petition of *William Smith*, Doctor in Divinity, Agent for the Trustees of the College, Academy, and Charitable School of Philadelphia, in the Province of *Pennsylvania*, and Provost of the Seminary ; and of *James Jay*, Doctor of Physick, Agent for the Governors of the College of the Province of *New York*, in the City of *New York*, in *America* :

"That the great Growth of those Provinces and the continual

1762 Accession of People to them from different Parts of the World, being some years ago observed by several of Our good Subjects there, they became seriously impressed with the View of the Inconveniences that must necessarily arise among so mixt a Multitude, if left destitute of the necessary means of Instruction, differing In Language and Manners, unenlightened by Religion, uncemented by a common Education, strangers to the Humane Arts, and to the just use of rational Liberty: that these Considerations were rendered the more alarming by sundry other Circumstances, and particularly" the prevalence of false teachers, who were especially active "in the Two important and central Provinces aforesaid."

"That from a deep Sense of these growing Evils, the Two Seminaries aforesaid, distant about One hundred Miles from each other, were begun in Two of the most important and populous trading Cities in Our *American* Dominions, nearly at the same Time and with the same View; not so much to aim at any high Improvement in *Knowledge*, as to guard against total Ignorance; to instil into the Minds of Youth just principles of Religion, Loyalty and a Love of Our excellent Constitution; to instruct them in such Branches of Knowledge and useful Arts as are necessary to Trade, Agriculture, and a due Improvement of Our valuable Colonies; and to assist in raising up a Succession of faithful Instructors, to be sent forth not only among our Subjects there, but also among the Indians in Alliance with us. . . .

"That, for the better answering these great and important Purposes, the aforesaid Seminaries are under the Direction of the Chief Officers of Government, sundry of the Clergy of different Denominations, and other Persons of Distinction in the respective Cities where they are placed; and their Usefulness has been so generally felt and acknowledged, that amidst the Calamities of an *Expensive War*, near Ten Thousand Pounds Sterling have been contributed in each of the said Provinces towards their respective Seminaries, and some Hundreds of Youth are continually educated as well on Charity as otherwise: But as Designs of so extensive a Nature, even in the most wealthy Kingdoms, have seldom been completed unless with the united Generosity of many private Benefactors, and often by the particular Bounty of Sovereign Princes, the Petitioners are persuaded it will not be thought strange that Individuals in Young Colonies should find all the Re-

KING'S COLLEGE IN 1760

sources in their Power inadequate to such a Work, and that 1762
the Governors and Trustees of the said Seminaries should have the just Apprehensions of seeing all that they have raised for their Support speedily exhausted, and an End put to their Usefulness, unless they can procure Assistance from distant Places, as the Expence of each of them is about *Four hundred Pounds Sterling* above their Income; the defraying of which will require an *additional capital* of above Six Thousand Pounds sterling apiece." . . .

Therefore a Royal Brief is issued "under the Great Seal of *Great Britain* authorizing the making a collection throughout the Kingdom, from *House* to *House*, for the *joint* and *equal* Benefit of the Two Seminaries and Bodies Corporate aforesaid."

This document, the original of which is in Lambeth Palace Library, was endorsed by Archbishop Secker, of Canterbury, with his own hand — "Brief for New York and Philadelphia Colleges, 19 Aug. 1762."

It is stated that "near ten thousand pounds sterling" had in response to the brief been contributed for each of the Colleges named. So far as can be ascertained the contributions for King's College were from the following sources: —

Five or six acres of the King's Farm, said to be worth four or five thousand pounds, were contributed by Trinity Church, New York. This constituted an endowment, not producing income of much amount for many years, but very valuable, consisting as it did of the four blocks, bounded by Church, Barclay, Greenwich, and Murray streets, and, with the exception of fifteen lots on Park Place, still held by the College.

£3202 from moneys raised by lotteries authorized by the General Assembly of the Province of New York.

£500 per annum out of the excise moneys of the Province of New York, for seven years from January 1, 1754, to pay salaries.

Subscriptions of the Governors appointed by the Charter, who each contributed, some £50, some £100, some £200.

1762 Contributions from other gentlemen of the City of New York.

£500 from Sir Charles Hardy, Governor-General of New York.

Bequest of Joseph Murray, his library, and his estate worth something over £9000.

Bequest of the Rev. Dr. Bristow of his library containing about 1500 volumes.

£2041 from Edward Antill.

£500 sterling from the Society for the Propagation of the Gospel in Foreign Parts.

£50 from Charles Ward Apthorpe.

Except as otherwise indicated, the contributions were, some of them certainly and the others probably, in colonial currency worth about half their stated value in pounds sterling.

The Royal Brief resulted in a benefit of about six thousand pounds sterling to King's College; and the King himself gave four hundred pounds sterling out of his private purse.

Additional contributions are noted in the records, as follows: —

Resolutions of thanks were passed, in June, 1763, to the Rt. Hon. William Pitt and the two Universities of Cambridge and Oxford for "Generous Donations."

£500 bequeathed by Paul Richard.

£100 bequeathed by James Alexander.

£100 from General Shirley.

£200 from General Monckton.

20 guineas contributed by Mr. Tanner, Rector of Lowestoff in Suffolk, England.

Still further contributions of small amount are recorded, such as: "two persons unknown gave each a guinea;" "Mr. Noel, Bookseller, gave Romain's Ed. of M. Callassio's Hebr. Concordance 4 vol. fol.;" "Sundry Gentlemen at Oxford gave Books whose names are in them;"

"Mr. Kilbourn painter gave the President Dr. Johnson's 1770
picture;" "Dr. Morton sent a Curious Collection of Ancient Alphabets on Copperplate;" "Bartholomew Crannell gave sundry books for the library;" "Jacob Le Roy, Esq., gave the organ;" "—— the Bell."

In February, 1767, a committee of the Governors, previously appointed for the purpose, reported that they had petitioned Sir Henry Moore, Governor of the Province of New York, for twenty-four thousand acres of land, and that his Majesty's Council had advised that the petition be granted. In the letters patent making the grant, issued March 14, 1770, the land is spoken of as being "within the limits formerly claimed by the government of New Hampshire," and is described as "all that certain tract or parcel of land within our province of New York situate, lying and being in the county of Albany on the west side of Connecticut river beginning at a beech tree marked with the letters W K," etc. It was ordained "that the said tract of twenty-four thousand acres should be erected into a township by the name of Kingsland." On March 20, 1770, the Committee of the Governors reported that the lands were situate in the new County of Gloucester [which had been set off from the County of Albany], in the Province of New York, and that the Governor had been pleased to constitute Kingsland the county town of the county. The Committee further reported measures for encouraging settlement and for granting leases to settlers.

In April, 1774, Governor Tryon, of the Province of New York, "for the Esteem which he bears to the said College and from a Desire of advancing as well the Interests thereof as to promote and extend its Usefullness in disseminating the Principles of Virtue, Literature and Loyalty and also for and in Consideration of the Sum of Five Shillings of lawful Money of the Province of New York to him in Hand paid," granted and conveyed to the

1774 Governors of King's College ten thousand acres of land also situate in the County of Gloucester. Any and all income from this tract was to be applied to the support and maintenance of "One or more Professorship or Professorships of and in the said Seminary in such Branch or Branches of Literature as to the said Corporation shall seem expedient" —— "The said Professors when established . . . to be severally called and known by the Name of TRYONIAN PROFESSORS the first Professor so to be appointed to be a professor of the municipal Laws of England."

It does not appear that any Tryonian Professor was ever appointed.

All anticipations of advantage from the grants of Governors Moore and Tryon were disappointed. No immediate benefit was derived from them, and, subsequently to the Revolution, they were wholly lost to the College in the settlement of a boundary dispute between the States of New York and New Hampshire, whereby the State of New York, in consideration of the sum of thirty thousand dollars (of which the College received nothing) surrendered the tracts, which were included in the new State of Vermont. "This treaty," says President Moore in his *Sketch*, "which the State of New York, from weighty considerations of public policy, rather than for the paltry sum of money paid, found it expedient to make, surrendered a property belonging to the College, which would at this day have been of immense value, and in so doing, may be regarded as having given to the College a claim for retribution, which all that the State has since done for it does not fully satisfy."

It is not known that any further or other contributions or grants were made for the benefit of King's College.

A meeting of the Governors of the College was held on August 4, 1774, to receive the report of a "Committee appointed to Prepare the Draft of a Royal Charter

Constituting the Seminary an University," etc. A copy 1763
of the minutes of this meeting, containing in full the proposed Charter ordaining, among other things, that "King's College shall be the Mother of the American University," may be found in the library of the Trustees in the office of their clerk.

Minutes of meetings of the Governors after this (if we except the certified copy of the minutes of a meeting held May 17, 1781, mentioned by President Moore in his *Sketch*) and any official record of contributions that may have been kept by the Governors, are not obtainable — having probably been destroyed during the occupancy of the College buildings for military purposes during the Revolution, or lost after the removal of the College Library and effects to the City Hall in 1776.

On March 1, 1763, a committee, appointed November 16, 1762, "to inquire into the state and circumstances of the College and the manner of Education, and prepare such Laws and Regulations, as they shall conceive necessary for the better ordering and good Government thereof," reported "That upon examination of the present Plan of Education, and Body of Laws, which were established in the Infancy of the College and then well adapted: They are of Opinion, That considerable Additions, Amendments and Alterations both in the present Plan of Education and Body of Laws, are become absolutely necessary, and which they now present to the Governors for their Approbation."

The "Laws and Orders of the College of New York adopted June 3, 1755," and the "Plan of Education" recommended by the Committee and adopted by the Board to supersede them, are given in Appendix B.

In May, 1763, it was "Ordered that the Committee that were appointed for Building the College be a Committee to inclose the College Ground with a Fence of Posts & Rails." A year later, in May, 1764, a Committee was appointed "to inclose the Ground fronting the South side

1763 of the College within a Board Fence" ; and in October of the same year the Committee was further empowered to build a lodge for the porter, to level the College yard, and to plant trees along the fence. The trees here provided for were planted by hands that had much to do subsequently with laying the foundations of the Republic. In speaking of the removal of the College from College Place in 1857, the Hon. John Jay, of the class of 1836, grandson of the first Chief-Justice of the United States, said, in an address before the Alumni of the College, December 21, 1876 : "It is a matter for regret that some of the stately sycamores which adorned the College Green were not preserved. . . . Those venerable trees had an historic interest from the fact which, when a boy, I heard from the lips of Judge Benson during one of his visits to my grandfather at Bedford, that those trees were carried to the green by himself, Jay, Robert R. Livingston, and, I think, Richard Harison, and planted by their own hands."

The troubles to which the regulations and the "fence" gave rise may be gathered from a *Book of Misdemeanors alias Black Book* which has been preserved. From it are taken the following examples of offences and their punishment : —

S. "reprimanded publicly at a visitation for having come thro' a Hole in the College fence, at 12 o'clock at Night." S. "suspended by the President for coming over the College fence at ½ past 11 o'clock last Night." V., D., and N., "who had gone over the College fence the preceding Tuesday, between the Hours of 3 and 4 P.M., to bathe, . . . after being reprimanded, were ordered by the Committee to be confined to College untill the next Saturday Evening — each of them was also directed to translate into Latin 4 pages of Dr. Chandler's Charity Sermon, besides attending the usual Collegiate exercises." D. "to be represented to the Committee, ye next visitation, for refusing to open his Door when repeatedly called upon by the President, (being sent for also from home, where he had not

been for some days) and causing four Doors to be broke open 1763
before he could be laid hold of — N.B. found, at last, in the Room opposite to his own, where he had hid himself, having opened the Door with a false key, and hid himself in one of the studies." "Students going without their Caps and Gowns to be presented to the next Board of Governors." "Ordered that B—— and D——, for being deficient each in two exercises, and also for frequently absenting themselves from Recitations, be confined within the College walls from next Monday till the Friday following; and also, besides their usual academical exercise, translate No. 316 of the Spectator into Latin, and get by Heart 40 lines from the Beginning of Book 1, Sat. 1 of Horace. In case of Failure or Neglect in any of these Particulars to be immediately presented to the Board of Governors for Degradation or Expulsion." D., "for stealing 8 sheets of Paper and a Penknife, was reprimanded in the College Hall before all the students, and after having his Gown stripped off by the Porter, he was ordered to kneel down and read a paper containing an Acknowledgment of his Crime, expressing much sorrow for it, and promising Amendment for the future — He was then forbidden to wear his Gown or Cap for one Week."

The meeting of the Governors in March, 1763, was a busy and a fruitful one. In addition to action already noted, the Board appointed Professor Harpur Librarian, at a small salary, with directions to make a catalogue of the books; and also, "as the Credit, Reputation and Increase of the College in a great Measure depend upon having a good and reputable Grammar School annexed to it," appointed a Committee "to prepare a plan for such a school and report as soon as conveniently they can." On the 12th of April following the plan was reported and adopted by the Board. It provided that — the school should be a part of the College and under the direction of the Governors; the Master should have a salary of £150 per annum, and, in case the tuition fees should be more than enough to pay the salary of the Master and the seat of the schoolhouse, he should have, in addition to his salary, 40*s.* per annum "for every such supernumerary scholar"; the Master

1763 should not teach more than thirty-two scholars without an usher nor more than seventy with one usher; the tuition fee should be £6 per annum, and, as gratuity to the Master, a guinea for entrance; the Governors and the Master should choose the books for the classes, with the editions; the hours for teaching in the school from the vernal to the autumnal equinox should be, in the morning, from six to eight o'clock and from ten to twelve, and, in the afternoon, from two till four and from five to six, and from the autumnal to the vernal equinox from eight in the morning until nine and from ten to twelve, and in the afternoon from two till four; the vacations should be two weeks at Christmas and one week each at Easter, Whitsuntide, and Michaelmas; public days, such as the King's birthday, etc., and also Saturdays and Thursdays in the afternoon, should be holidays, so far as attendance at school was concerned, but the Master should, at his discretion, set exercises for those days as well as in the stated vacations; every scholar should, before Christmas every year, provide one load of nut wood for the use of the school; not only should the Latin and Greek languages be taught, but the students should also be instructed in the English language; the Master himself should be particularly careful of the exercises of the superior classes, as well those in English as in the other languages.

The Committee was authorized to collect subscriptions for the school.

At a meeting of the Governors on the twenty-fourth of August following, the Committee reported that the school had been opened with Matthew Cushing of Charlestown in Massachusetts as Master; that a number of scholars were in attendance and more were expected.

In November following the number of pupils was twenty-seven "and many more soon expected." Mr. Alexander Leslie, an alumnus of the College of the Class of '62, was to be engaged as usher.

No further account of the school is given in the min- 1767
utes till the twentieth of November, 1766, when it was reported as greatly neglected by the Master. In August, 1767, the Committee on the school reported that the number of pupils had fallen to fifteen, that the annual expense of it was about £260, that the College had already sunk about £200, exclusive of £170 outstanding debts: and it was accordingly ordered that the usher be discharged at the end of six months. How the school prospered after this cannot now be determined, as there is no further reference to it in existing minutes of the Governors; but as reference to it is made in a paper written in 1773, or thereabouts, by President Cooper, it probably continued till the closing of King's College in 1776.

CHAPTER IV

1763–1775

PRESIDENT MYLES COOPER

Dr. Johnson resigned the presidency March 1, 1763, and it was ordered that "the thanks of this Corporation be given to the said Doctor Johnson for his faithful services in his Station." Subsequently, the Governors expressed more fully their appreciation of his devotion and value and voted him a pension of £50 per annum, a very small amount, but as large as their circumstances would allow. Mr. Cooper took temporary charge as acting President, and on the 12th of April following was unanimously elected President.

The first Commencement at which President Cooper presided was held in May, 1764, in St. George's Chapel, Trinity Parish, corner of Beekman and Cliff streets, and was attended by General Gage and His Majesty's Council. On this occasion the salutatory was delivered by Richard Harison, then seventeen years of age, and an address on the blessings of peace was pronounced by John Jay, the other member of the graduating class.

On Mr. Cooper's accession to the presidency a new Plan of Education and Body of Laws were put into effect, and the Grammar School was soon thereafter started.

President Cooper, Tutor Cutting, and Professor Harpur gave all the instruction to students of the College, till Mr. Cutting's resignation in October, 1763. Mr. Cutting's place was found very difficult to fill, and it was not till October, 1765, that Samuel Clossy, M.D., of Trinity College, Dublin, a gentleman of repute in his own country

as scholar, author, and practitioner, was chosen his suc- 1773
cessor. Dr. Clossy was made also Professor of Natural Philosophy, Professor Harpur confining himself thereafter to Mathematics. Professor Harpur resigned in February, 1767, and it does not appear that any one was appointed to succeed him.

In August, 1767, the Governors instituted a Medical School within the College, and appointed a committee of their own body to regulate it.

President Cooper went to England in 1771, and remained for nearly a year, on matters connected with the College and with the Church in whose counsels he was prominent. During his absence the Rev. Dr. Charles Inglis, one of the Governors and subsequently Bishop of Nova Scotia, appears to have acted in his place.[1]

In 1773 Washington entered his stepson and ward, John Parke Custis, as a student. The memorandum in the Matricula after his name is "Staid only four months."

His brief stay was not due to any dissatisfaction with the College, on his part or on that of his stepfather, but to his attachment to a young daughter of Judge Calvert of Maryland whom he subsequently married. In the quaint language of the day, "owing to the Impression of this Passion" he could not long apply himself to study and hastened away. Letters of his to Colonel Washington and to his mother give a tranquil and pleasing view of life in King's College in his time. Under date of July 5, 1773, Custis writes to his guardian: —

"It gives me pleasure that I now have it in my Power to inform you how agreeably everything is settled; there is nothing that has been omitted by my good Friend Doctor Cooper which was necessary to my contentment in this place, and Gratitude as well as Truth oblidges me to say that the other Professors are not the least remiss in their Duty, but give all the assistance they can consistent with the Duty they owe to

[1] George H. Moore.

1773 the other students. I attend at stated hours, the Professors in Mathematicks, Languages, Moral and experimental Philosophy, & I hope the Progress I make in these useful branches of knowledge will redown not only to my own credit, but to the Credit of those who have been instrumental in placing me here, and in particular render you some compensation and Satisfaction for the parental Care and Attention you have always and upon all occasions manifested towards me and which demand my most grateful thanks & returns to make which shall be the constant care of J. P. Custis."

Like a true Virginian young Custis had his saddle horses with him, and of one of them he says, in the letter just quoted: "He is a horse I know to be good, and one I have a vast affection for and except riding there is no other exercise to be us'd here," from which it would appear that athletic sports, which now engage so much attention, had then no place in collegiate training.

Dr. Cooper, writing about the same date to Colonel Washington, relates of young Custis that "He lives now altogether in the College and dines with the Professors and myself in the College Hall. He has fitted up a Room in a neat plain Taste, attends his Instructors punctually, and I doubt not will make a proficiency equal to ye warmest wishes and expectations of his best Friends. He has already gained much upon ye Affections of his Instructors, which is a circumstance that cannot fail of producing very beneficial effects with regard both to his learning and Happiness, during his residence in this Place."

In a letter to his mother young Mr. Custis writes: —

"It is now time to give you a short plan of my apartments and of my way of living. I have a large parlour with two studys or closets, each large enough to contain a bed, trunk and couple of chairs, one I sleep in and the other Joe [presumably his servant] calls his, my chamber and parlour are papered, with a cheap tho' very pretty paper, the other is painted; my furniture consists of six chairs, 2 tables, with a few paultry Pictures. I have an excellent bed, and in short

everything very convenient and clever. I generally get up 1773
about six or a little after, dress myself and go to Chappel, by the time that prayers are over, Joe has me a little breakfast, to which I sit down very contentedly, & after eating heartyly, I thank God and go to my Studys, with which I am employed till twelve, then I take a walk and return about one, dine with the Professors and after Dinner study till six at which time the Bell always rings for Prayers, they being over College is broak up and then we take what amusement we please."

Some of these amusements were doubtless such as are referred to in the "Black Book." But there were others of a different kind, such as, for example, were afforded by a "Literary Society for the encouragement of learning & the excitement of emulation and attendance among the students of the College." This society was organized as early as June, 1766, and was, in all probability, the Club in which, in 1774 or thereabouts, Alexander Hamilton exercised himself in public debate and is said to have gained distinction.

Under the date of 1773, the Matricula notes, "This year John Vardill, M.A., was elected Fellow and Professor of Natural Law." John Vardill was an alumnus of King's College of the class of '66. He was one of the few graduates of the College who sympathized with and supported the Tory principles of his Professor and President, Dr. Cooper. President Moore, in his *Sketch*, says of him: "He must have left this country very soon after his appointment if indeed he were not absent when it was made, for the writer of a letter from London, in the beginning of 1775, speaks of him as 'Parson Vardill, a native of New York, who has been here a twelvemonth, a ministerial writer under the signature of *Coriolanus*, lately appointed King's Professor in the College of New York with a salary of £200 sterling.'" A letter from Professor Vardill to Colonel Washington, dated "King's College Sept. 1773," which has recently been published,

1774 shows, however, that he actually occupied the chair to which he was appointed, though probably for but a brief period.

When President Cooper returned from England, the preliminary contests of the approaching Revolution had commenced. He warmly espoused the side of the King, and used voice and pen on behalf of the Crown. The general spirit and tenor of his contentions may be gathered from *A Friendly Address to all Reasonable Americans on the Subject of our Political Confusions*, which he wrote, and had "Printed for the Purchasers, 1774." In this he set forth the wisdom of the English Constitution, under which "the subjects of Great Britian are the happiest people on earth," and of all such subjects, "those who reside in the American Colonies have been, and, were they sensible of their own advantages, might still be, by far the happiest"; minimized the exactions and evils of which the people complained; ridiculed the idea that a tax of three pence a pound on tea exported to America justified the resentment and the opposition which it occasioned; insisted that "the ill consequences of open disrespect to government are so great, that no misconduct of the administration can justify or excuse it"; declared "there is too much reason to believe that our minds are unprincipled and our hearts disposed for rebellion"; asserted the futility of resistance, as the "island of Britian is able to govern ten such Americas, if she will exert her power"; stated "it is morally certain that, in the day of trial, a large majority of the Americans will heartily unite with the King's troops, in reducing America to order. Our violent Republicans will then find themselves deserted by thousands and thousands in whom they now confide, and inexpressibly dreadful must be their disappointment;" and expressed the opinion that "a rebellion of the Colonies, whether it should prove successful or unsuccessful, would necessarily terminate in ruin and destruction."

Though Dr. Cooper had exercised the influence and 1775
the authority of the Presidency of the College for a dozen years, was an elegant scholar, a wit, a facile writer in prose and verse, a charming conversationalist, a popular and most welcome member of polite society, he failed to attract to the support of his political views any considerable number of the students and alumni of King's College. He found among them, indeed, some of his most active and most effective opponents. In one of his political controversies, he is said to have been worsted by an anonymous writer, whom he afterward discovered to be Alexander Hamilton, a student in one of the younger classes of the College at the time. In speaking of two of Hamilton's pamphlets in reply to a Loyalist, Professor Moses Coit Tyler says: "It is not easy to overstate the astonishment and incredulity with which the public soon heard the rumor, that those elaborate and shattering literary assaults on the argumentative position of the Loyalists were, in reality, the work of a writer who was then both a stripling in years and a stranger in the country — one Alexander Hamilton, a West Indian by birth, a Franco-Scotsman by parentage, an undergraduate of King's College by occupation, a resident within the Thirteen Colonies but little more than two years, and at the time of the publication of his first pamphlet only seventeen years of age."[1]

The indignation of President Cooper's political adversaries finally found expression in a violent letter addressed to him and four other gentlemen of the city by name. The letter may be found in the American Archives, 4th series, Volume II, Column 389, and is in large part as follows: —

"PHILADELPHIA, April 25th, 1775.

"It appears from a number of authentick letters from *London*, that the present hostile preparations against the

[1] *The Literary History of the American Revolution*, Vol. I, p. 385.

1775 *American Colonies* were occasioned by nothing but assurances from you of the defection and submission of the Colony of *New York*. It is impossible to unfold the extensive and complicated nature of your crimes. You have defeated the attempts of the Congress to bring about a constitutional reconciliation with *Great Britain*. . . . But you have done more; you have unsheathed the sword of *Britain*, and pointed it against the bosom of your country. You have held up a signal for a Civil War; and all the calamities of Towns in flames, a desolated Country, butchered fathers, and weeping widows and children, now lay entirely at your doors. . . . Repeated insults and unparalleled oppressions have reduced the *Americans* to a state of desperation. Executions of villains in effigy will now no longer gratify their resentment. . . . The injury you have done to your country can not admit of reparation. Fly for your lives, or anticipate your doom by becoming your own executioners.

"THREE MILLIONS."

A fortnight after the date of this letter, on the night of May 10, an angry mob went to the lodgings of Dr. Cooper in the College to execute vengeance upon him. One of the students hastened on before to warn the President, who was in bed and asleep, of his danger. When the crowd gathered at the College, Alexander Hamilton and Robert Troup, of the class of '74, mounted the steps to keep the people at bay, and Hamilton addressed them in an impassioned speech on the impropriety of their conduct and the disgrace they were bringing on the cause of liberty by their excesses. The delay thus occasioned enabled the President to escape over the back fence, in very scanty apparel. In some verses descriptive of this occasion, which Dr. Cooper afterward wrote, he says, after speaking of his being aroused from slumber by —

"A heaven directed youth,
Whom oft my lessons led to truth," . . .

"I wake — I fly — while loud and near,
Dread execrations wound my ear,
And sore my soul dismay.

MYLES COOPER, LL.D. (Oxon.; King's)
President, 1763–1775

One avenue alone remained, 1775
A speedy passage there I gained,
And winged my rapid way.

"That moment, all the furious throng,
An entrance forcing, poured along,
And filled my peaceful cell;
Where harmless jest, and modest mirth,
And cheerful laughter oft had birth
And joy was wont to dwell.

. . . . .

"Nor yet content — but hoping still
Their impious purpose to fulfil,
They force each yielding door:
And while their curses load my head
With piercing steel they probe the bed,
And thirst for human gore.

"Meanwhile along the sounding shore,
Where Hudson's waves incessant roar,
I work my weary way;
And skirt the windings of the tide,
My faithful pupil by my side,
Nor wish the approach of day."

After wandering along the river bank till near morning he found refuge in the house of a friend till the following night, when he embarked on an English sloop of war in the harbor, the *Kingfisher*, Captain James Montagu, in which he went to England. On the supposition that his absence would be but temporary, the Governors, on May 16, appointed as *Præses pro tempore* Revd. Benjamin Moore, of the class of '68, afterward Bishop of New York. He was to take charge of the College until the return of Dr. Cooper, with whom he was to settle as to the allowance to be made him out of the President's salary for his care and trouble. Dr. Cooper never returned to America. He ultimately settled in Edinburgh, as minister of the First Episcopal Chapel, and died there, suddenly, in 1785.

CHAPTER V

THE ALUMNI OF KING'S COLLEGE

1774 THE last public Commencement of King's College was held in Trinity Church on Tuesday, May 17, 1774. The *New York Gazette and Weekly Mercury* said of it: "The celebrity was honoured by the presence of his Excellency, *General Haldimand*, the principal officers of the Army, the Clergy and a very brilliant Assembly." "The Discourses upon this occasion did great Honour to the Performers, who justly merited and received universal Approbation."

In 1775 there were seven students graduated Bachelor of Arts, but "there was no public Commencement this year on account of the absence of Dr. Cooper."

The students of the class of '76, six in number, who had satisfactorily completed the course, received their degrees, but there was, as noted in the Matricula, "No public Commencement this year. The Turbulence and Confusion which prevail in every part of the Country effectually suppress every literary Pursuit." The Matricula previously states, under the heading "Anno 1776"; "There were no Admissions this year. On the sixth of April, a message was sent to the Treasurer of the College (signed Robert Benson) from a number of men who stiled themselves the *Committee of Safety* desiring the Governors to prepare the College in 6 days for the Reception of Troops. In consequence of this Demand, the students were dispersed, the Library, Apparatus, etc., were deposited in the City Hall, and the College was turned into

an Hospital." This seizure of its building occasioned the 1776
College great loss. President Moore says of it:

"Almost all the apparatus and a large portion of the books belonging to the College, were wholly lost to it in consequence of this removal; and of the books recovered, six or seven hundred volumes were so, only after about thirty years, when they were found, with as many belonging to the New York Society Library and some belonging to Trinity Church, in a room in St. Paul's Chapel where, it seemed, no one but the Sexton had been aware of their existence, and neither he nor any body else could tell how they had arrived there. Previous to this dispersion of the College Library, it contained, besides books purchased by the Governors and those bequeathed by Dr. Bristow and by Mr. Murray, many valuable works given by the Earl of Bute and other individuals, and from the University of Oxford, a copy of every work printed at the University Press."

The Matricula of King's College closes with a note of the admission, in 1777, of William Walton and James De Lancey Walton. It appears, therefore, that some instruction continued to be given. When the College building became a military hospital, Mr. Leonard Lispenard provided a house for the President, tutors, and students of the College, and it was doubtless here that the College exercises, so long as they continued, were given. Mr. Moore lived in this house, as President *ad interim*, during a part of the war.[1] The Corporation was kept alive by occasional meetings of the Governors. The evidences of this are not numerous, but they would seem to be sufficient. There was a meeting on August 4, 1774, to which reference has been made; President Moore, in his *Sketch*, states "there exists a certified copy of minutes of a meeting [of the Governors] on the 17th of May, 1781"; there is among the papers in the office of the Clerk of the Trustees an original memorandum, dated September 14,

[1] *Minutes of the Trustees of Columbia College*, March 28, 1788.

1776 1781, signed "William Walton, Sam Bayard, Jun.," certifying "that William Walton, Esquire, and Samuel Bayard, Jr., two of the Committee appointed by the Governors of King's College for letting the lands of the said College have agreed with Thomas Lincoln" to grant him a lease of certain lots for twenty-one years; in the minutes of the Regents of the University of the State of New York, acting as Trustees of Columbia College, February 15, 1785, there is notice of the presentation of "a letter from Aug. v. Horn, requesting the appointment of a Committee to audit his accounts as Treasurer of the late corporation of King's College, and signifying that he thinks himself entitled to a certain salary and for the term of five years next preceding the month of May last"; the petition of the Governors (or so many of them as remained) to the Legislature of New York, 1784, asking that the Charter be suitably changed and the College made a University, which petition was received as authoritative and acted upon by the Legislature. The educational record of the College, under its original name, practically closed, however, with the execution of the order of the Committee of Safety and the bestowal of degrees upon the class of '76.

It was the great good fortune and the glory of King's College, in its brief career of twenty-two years, during which it educated upwards of one hundred young men, to contribute through them, in a remarkable degree, to the welfare of the country. In the movements that preceded and led up to the Revolution, its alumni bore an honorable part in forming public opinion and in directing it aright; in the War of Independence they did their share in bearing the burdens, and in bringing to a successful issue the strife of arms; during the war and after it, they proved to be unexcelled in diplomatic skill, in constructive statesmanship, in judicial wisdom, and in devising and promoting measures that make for the material and the spiritual progress of the State.

RT. REV. SAMUEL PROVOOST, S.T.D. (PENNSYLVANIA)
Chairman of the Trustees, 1795–1801

Robert Troup, Henry Rutgers, Philip Pell, John 1776
Doughty, Stephen Lush, Edward Dunscomb, Gulian Verplanck, Leonard Lispenard, and others, served their country well in the field, in council, and in legislation; Richard Harison and Egbert Benson were lawyers of high repute, the former of whom, a delegate to the convention that framed the Constitution of the United States, became, by the appointment of Washington, the first United States attorney for the district of New York, and the latter, in addition to other public services of high character, became Judge of the Supreme Court of New York and Chief-Judge of the United States Court in the New York Circuit; Henry Cruger was a "merchant prince" of the early days; Samuel Bard was a learned, skilful, and public-spirited physician, who left enduring memorials of his life; Samuel Provoost and Benjamin Moore were eminent clergymen, who became, respectively, the first and the second Bishops of New York in the Episcopal Church, and the latter of whom was, also, twice President of the College that bred him; John Stevens was a great engineer, conspicuous for his agency in the invention, introduction, and gradual improvement of steamboats, and one of the first to perceive and point out the practicability and advantage of railroads on a large scale; Gouverneur Morris was a profound constitutional lawyer, a delegate to and a most important member of the United States Constitutional Convention of 1787, a financier, a diplomatist serving his country as a Special Commissioner to England and as Minister to France, a Senator of the United States, a Canal Commissioner of New York, and, as such, contributing in a fundamental and lasting way to the development of the internal resources of his native State, "the associate of Clinton in joining the ocean with the lakes." Of Alexander Hamilton, John Jay, and Robert R. Livingston, Mr. Gulian C. Verplanck, of the class of '01, in an address before the literary societies of Columbia College in 1830,

1776 spoke eloquently, and words of his with regard to them may close this imperfect record : —

"At the beginning of that glorious struggle [the Revolutionary War] Alexander Hamilton was still a youth, engaged in pursuing his College studies with that ardour and application which characterized all his mental efforts throughout life. The momentous questions of the rights of the Colonies and the powers of the parent state, had been discussed in New York with no ordinary talent on both sides. The mind of the future statesman was roused by the subject. Like the Swedish warrior who, when he heard for the first time the whistling of the bullets about him, exclaimed '*This* henceforth shall be my music,' young Hamilton, with a nobler instinct, when he then first turned his mind to the investigation of great principles, the duties of subjects, their rights, and those of their rulers and of the state, felt the true vocation of his genius, and rushed impatiently forward to enter upon his destined career of a patriot statesman. Then it was that his talents were first employed in the public service ; and . . . 'America saw with astonishment a lad of seventeen in the ranks of her advocates, at a time when her advocates were sages and patriots.' A few months more found the same youth the companion in arms and the confidential friend of Washington." "It was to his foresight, his influence and eloquence, more than to any other man, perhaps more than to all others, that we owe that union of the States under the present constitution, which rescued us from weakness and anarchy, and gave us a permanent rank among the nations of the earth." "The effective defence of this constitution, its luminous exposition, and its victorious adoption after a doubtful and embittered contest, give to Hamilton other and equally enduring claims upon the gratitude of posterity. In his speeches in the convention of this State, and in the more expanded vindication and exposition of the constitution contained in his numbers of the Federalist, whilst the immediate object of clearing up doubts, satisfying scruples, and refuting objections was victoriously obtained, he has left to succeeding generations a treasure of political science, which must ever be resorted to as the most authoritative and masterly exposition of our constitutional charter, and the most luminous

commentary upon the nature and history of representative and federative government. Then succeeded his short but brilliant administration of our finances, rendered memorable by that efficient organization of the public revenue and resources which replenished the bankrupt treasury, raised the prostrate national credit and placed it on a firm and durable basis, gave immediate activity to commerce and the arts, and security to all their pursuits. It was memorable too for a series of official reports from his pen, which have proved the inexhaustible source of instruction, of argument, of authority to our statesmen, political economists, jurists and orators, under every administration and all forms of parties." 1776

"The name of John Jay is gloriously associated with that of Alexander Hamilton in the history of our liberties and our laws. . . . At the age of twenty-eight, he drafted, and in effect himself formed, the first constitution of the State of New York, under which we lived for forty-five years, which still forms the basis of our present State government, and from which other states have since borrowed many of its most remarkable and original provisions. At that age, as soon as New York threw off her colonial character, he was appointed the first Chief-Justice of the state. Then followed a long, rapid and splendid succession of high trusts and weighty duties, the results of which are recorded in the most interesting pages of our annals. . . .

"It was from his richly stored mind that proceeded, while representing this State in the Congress of the United States (over whose deliberations he for a time presided), many of those celebrated state papers, whose grave eloquence commanded the admiration of Europe, and drew forth the eulogy of the master orators and statesmen of the times — of Chatham and Burke — whilst, by the evidence which they gave to the wisdom and talent that guided the councils of America, they contributed to her reputation and ultimate triumph as much as the most signal victories of her arms. As our Minister at Madrid and Paris, his sagacity penetrated, and his calm firmness defeated, the intricate wiles of the diplomatists and cabinets of Europe, until in illustrious association with Franklin and John Adams, he settled and signed the definitive treaty of peace, recognizing and confirming our national

1776 independence. On his return home a not less illustrious association awaited him in a not less illustrious cause — the establishment and defence of the present constitution, with Hamilton and Madison. The last Secretary of Foreign Affairs under the old confederation, he was selected by Washington as the first Chief-Justice of the United States under the new constitution. I need not speak of the talent with which he discharged the duties of this latter station. . . . His able negotiation and commercial treaty with Great Britain, and his six years' administration as Governor of this State, completed his public life. As the character of Hamilton presents, in its soldierlike frankness and daring, a beautiful example of the spirit of chivalry applied to the pursuits of the statesman, so in that of Jay, pure and holy justice seemed to be embodied. He lived as one —

> "'Sent forth of the Omnipotent, to run
> The great career of justice.'

"After a long and uninterrupted series of the highest civil employments in the most difficult times, he suddenly retired from their toils and dignities, in the full vigour of mind and body, and at an age when, in most statesmen, the objects of ambition show as gorgeously, and its aspirations are as stirring as ever. . . . For the last thirty years of his remaining life, he was known to us only by the occasional appearance of his name, or the employment of his pen in the service of piety or philanthropy. A halo of veneration seemed to encircle him, as one belonging to another world, though yet lingering amongst us. When the tidings of his death came to us, they were received through the nation, not with sorrow or mourning, but with solemn awe; like that with which we read the mysterious passage of ancient scripture — 'And Enoch walked with God, and he was not, for God took him.'"

"Eloquent and learned, graced with taste and fancy, the accomplishments of elegant letters and arts, and the acquisitions of solid science, Robert R. Livingston was the fellow-labourer of Jay and Hamilton in achieving the liberties of the United States, and in rearing the fabric of our civil institutions, as well as their ablest rival and opponent in the subsequent division of parties. He filled for twenty-five years the first law office of this State; and

during that period of the Revolution, in which the best talent of the nation was employed in the diplomatic service, acted as Secretary of Foreign Affairs to Congress, with an ability and talent at that time duly estimated, but which had fallen into oblivion, and become unknown to most of the present generation, until their effects were again conspicuously brought to light by the very recently published diplomatic correspondence of the American Revolution. These alone are signal claims to distinction; but in him they are lost in the blaze of far brighter and more lasting honours. His first act as an American statesman, was as one of the Committee of five (Jefferson, Franklin, John Adams, Roger Sherman and Robert R. Livingston) who, in the Congress of 1776, prepared and presented the Declaration of Independence. His last political transaction was the negotiating and concluding that treaty which added to our empire Louisiana, with the command of the Mississippi and that vast territory whence one mighty state after another is now successively bursting into life. Thus the name of Livingston is deeply inscribed upon the very corner-stone of our national liberties, and on the broadest arch of our national power." "Splendid as were the incidents of Chancellor Livingston's official and political career, he himself wisely looked with more satisfaction, and his best fame may hereafter rest, upon his efficient agency as an enlightened private citizen in hastening forward the march of improvement over our land. He was among the first in this State who applied to agriculture the science and the interest of a liberal study. . . . The arts of taste and design found in him one of their earliest and most judicious patrons. Under his auspices the first academy in this country for their cultivation was formed, and under his immediate direction it was provided with the best means of improvement for the artist, and of instruction and refinement to the general taste. Above all, his agency in the invention of steam-navigation, his enlightened science in perceiving its practicability and admirable use, his prophetic confidence in the ultimate success amidst repeated disappointments, losses and ridicule, and finally his sagacity in seizing upon and associating with himself the practical genius of Fulton, whose plans had been rejected with scorn by the rulers, the *savans*, and the capi- 1776

1776 talists of the old world, combine to place him in the highest ranks of the lasting benefactors of the human race. It is a beautiful thought of Lord Bacon's, that antiquity, which honoured the law-givers, the founders or deliverers of states, but with the titles of worthies or demi-gods, rightly bestowed upon those who had invented or improved the arts and commodities of human life 'honours (as he terms them) heroical and divine'; because the merit of the former is confined within the circle of one age or nation, but that of the others is indeed like the benefits of heaven, being permanent and universal. . . . It was therefore a proud eulogy as well as a true one, which a distinguished Professor lately pronounced upon this College, when he traced to her walls and lecture-rooms, the germs of the greatest practical improvements which science has bestowed upon our state and nation — the steam-navigation of Livingston and Stevens, and the canal system of Morris and Clinton."

CHAPTER VI

1784–1787

COLUMBIA COLLEGE UNDER THE REGENTS OF THE UNIVERSITY OF THE STATE OF NEW YORK

When the independence of the United States had been confirmed by the treaty of peace with Great Britain in 1783 — in the negotiation of which treaty a son of King's College, John Jay, of the class of '64, is said to have been so influential that it was "not only chiefly, but wholly by his means that it was brought to a successful conclusion" — the attention of the Legislature of New York was directed to the necessity of providing education for the people as a means of ennobling and making permanent the liberty that had been secured. King's College had suffered severe losses during the war and had remained practically in abeyance for eight years. Numerous vacancies had occurred in the Board of Governors by the death or absence of many of its members, and the interposition of the Legislature had become necessary to restore the vitality of the Corporation. Accordingly, the surviving and present remnant of the body of Governors petitioned the Legislature to erect the College into a University, and to make such alterations in the Charter as the changed condition of affairs might demand.

Moved by this petition, the Legislature of the State of New York passed, May 1, 1784, "An Act for granting certain privileges to the College heretofore called King's College, for altering the name and Charter thereof, and erecting an University within this State." By this Act was created a "body corporate and politic" styled the

1784 "Regents of the University of the State of New York, of whom the Governor, the Lieutenant-Governor, the President of the Senate for the time being, the Speaker of the Assembly, the Mayor of the City of Albany, the Attorney-General and the Secretary of the State respectively for the time being" were constituted Regents by reason of their offices, together with twenty-four gentlemen designated by name, and representatives of the "respective religious denominations in this State" to be chosen by the clergy thereof.

The Regents were given

"full power and authority to ordain and make ordinances and bye laws for the government of the several Colleges which may or shall compose the said University" created by the Act; were "impowered to found Schools and Colleges in any such part of the State as may seem expedient to them and to endow the same, vesting such Colleges so endowed with full and ample powers to confer the degree of Batchelor of Arts, and directing the manner in which such Colleges are to be governed, always reserving, . . . a right to visit and examine into the state of literature in such College; . . . every such School or College being at all times to be deemed a part of the University"; were vested with "all the rights, privileges and immunities heretofore vested in the Corporation" of King's College, and were endowed with all the estate, real and personal, of that Corporation to be held and "applied solely to the use of the said College"; were "further impowered and directed as soon as may be to elect a President and Professors for the College heretofore called King's College, which President shall continue in place during the pleasure of the Regents of the University," and were instructed "that from and after the first election the said President and all future Presidents shall be elected from out of the Professors of the several Colleges, that may or shall compose the said University, and that no Professor shall in any way whatsoever be accounted ineligible, for or by reason of any religious tenet or tenets that he may or shall profess, or be compelled by any bye law or otherwise to take any religious test-oath whatsoever." The Act further

COLUMBIA COLLEGE IN 1790

ordained "that the College within the City of New York 1784
heretofore called King's College be forever hereafter called and known by the name of Columbia College."

Mr. George H. Moore in his *Origin and Early History of Columbia College* remarks that King's College emerged from the Revolution "with the new name of Columbia, a word and name then for the first time recognized anywhere in law and history."

The Regents of the University held their first meeting on the third day after their appointment, at the house of John Simmons, an innkeeper in Wall Street, New York City, but there being no quorum present they adjourned to the following day. On May 5 a quorum being present, Governor George Clinton was elected Chancellor of the University; Lieutenant-Governor Pierre Van Cortlandt, Vice-Chancellor; Brockholst Livingston, Treasurer; and Robert Harpur, Secretary. The Treasurer and the Secretary were instructed to "demand and receive from the late Treasurer and Clerk of the late corporation of the College called King's College, and from any other person or persons" all records, books and papers and all property of whatever kind, "lately belonging to the said late Corporation," and "in case of refusal to deliver the same to commence suits for the recovery thereof." The election of a President of the College was considered and postponed. The Rev. John Peter Tetard, who had taught a French school in New York before the Revolution and had been, by appointment of the New York Provincial Congress in 1775, French interpreter to General Schuyler and "Chaplin for the Troops of this Colony," was elected Professor of the French Language. Committees were appointed to supervise the repairs of the College building, to report by-laws, to devise a proper seal, to take measures for the recovery of moneys due the College on bonds, mortgages, leases or otherwise, and to engage instructors "for the term of twelve months."

1784 On the 15th of May a Grammar School was instituted with William Cochran, who had been educated at Trinity College, Dublin, as Headmaster, "with permission to remove his present school thither." Mr. Cochran was made also temporary instructor, in the College, of the Greek and Latin Languages, to the Professorship of which he was appointed in the following December.

On the same day, May 15, the examination of candidates for admission to the College, and their admission, was intrusted to a committee consisting of the "Chancellor or Vice-Chancellor and any two of the Regents," with Professor Tetard and Mr. Cochran; and each year, during the control of the Regents, a similar committee was appointed for the like purpose.

Two days later De Witt Clinton entered the Junior Class, the first student of the College under its new name. "It was, I may say, a mere accident," wrote Professor Cochran many years later to Dr. David Hosack, "that either that Seminary or myself has had any share in educating so great and useful a man. In the summer of 1784, his father brought him to New York, on his way to Princeton College, to place him in that Seminary. The Legislature had passed an act in the preceding winter, for restoring and new naming King's College; afterwards to be a University by the name of Columbia. But no final arrangements or appointments had been made; only a committee was impowered to provide, in a temporary way, for what might be most needful. The late Mr. Duane, then Mayor of New York, was one of the committee, who hearing that the nephew of the Governor was going out of the State for his education, applied to me, to know if I would undertake the care of him, and such others as might offer, until the appointments for the College could be made. To which I readily agreed, and young Clinton with half a dozen more, were put under my tuition." [1]

[1] See Hosack's *Memorial of De Witt Clinton*, New York, 1829.

During 1784 nine students were admitted, all to the Junior Class. 1784

Colonel Matthew Clarkson was appointed and authorized, at a meeting held May 26, to proceed to France and the United Netherlands to solicit and receive benefactions for the use of the University, and was instructed to "purchase such philosophical apparatus for the College as Dr. Franklin, Mr. Adams and Mr. Jefferson, Ministers of the United States, should advise."

The Regents soon became convinced that the Act constituting them was defective, by reason of "the dispersed residences of many of the Regents," "the largeness of the quorum who are made capable of business," and certain obscurities giving rise to doubts as to the construction of the Act. They submitted the matter to the Legislature, and the Legislature, on November 26, 1784, passed an amendatory Act, appointing additional Regents, reducing the quorum, and providing for meetings. The Act also authorized the Treasurer of the State to advance the sum of £2552 to the Treasurer of the University for the use of Columbia College.

Dr. Rodgers, Colonel Hamilton, and Dr. McKnight were, on November 26, appointed a committee "to prepare and report a plan for a subscription to be opened in the State for the benefit of the University, with an address to the citizens on that subject." At the same meeting a committee, of which Mayor Duane and Colonel Hamilton were members, was requested "to report the plan of education for the present, and the number of officers necessary to carry it into execution."

At a meeting held December 14, 1784, a committee, previously appointed, reported that "the annual income of Columbia College was computed to be £1000"; recommended the establishment of seven Professorships and nine "extra Professorships" in the Faculty of Arts, eight Professorships in the Faculty of Medicine, three Professor-

1784 ships in the Faculty of Law, Professorships in the Law of Nature and Nations, in the Roman Civil Law and Municipal Law, the Oriental Languages, in German, in Low Dutch, in Civil History, in Architecture, in Commerce, in Agriculture, in Music, and in Painting, and that a "Faculty of Divinity be formed by such Professorships as may be established by the different Religious Societies within the State." The committee further recommended that a President, a Secretary, and a Librarian be appointed; "that the different Professorships in the Faculty of Arts be completed as soon as possible, and that the following salaries be annexed to each Professorship independent of the Emoluments of the Classes, viz.: Latin, Greek, Moral Philosophy, each £100 per annum — Rhetoric and Logic £50 — Mathematics, Natural Philosophy and Astronomy, each £200 — and that the Professor of the French Language already appointed be allowed £100 per annum — and that the annual salary of the President, as such, be £200."

The Professorships that were filled were the following: In the Faculty of Arts: Latin, William Cochran, and Greek, the same; Rhetoric, Rev. Benjamin Moore, of the class of '68; Geography, Rev. John D. Gross, S.T.D.; Natural Philosophy and Astronomy, Dr. Samuel Bard, of the class of '63; and the following "extra Professorships" distinguished, apparently, from "Professorships" by having no salary attached to them, viz.: Oriental Languages, Rev. Johann C. Kunze, S.T.D.; German Language, Rev. Dr. Gross. In the Faculty of Medicine: Chemistry, Dr. Samuel Bard, who resigned early in 1785, to become Professor of Natural Philosophy and Astronomy and was succeeded by Henry Moyes, LL.D.; Natural History, Dr. Moyes; Institute of Medicine, Dr. Benjamin Kissam; Anatomy, Dr. Charles McKnight, and Surgery, the same; Midwifery, Dr. Ebenezer Crosby; Practice of Physic, Dr. Nicholas Romayne.

On the 4th of April, 1785, a committee appointed to examine the state of funds of the College and "to enquire

for a proper person to be appointed President and Pro- 1785
fessor of Mathematics" reported that there were in the hands of the Treasurer £952, and in the hands of Mr. Cotes of London, subject to the draft of the Treasurer, £1169 14*s*. 6*d*.; that the College lots, if let out to the best advantage, would bring in about £250 per annum; that if all debts due to the College were prosecuted to a settlement, "a sum not less than £12000 might be secured, the income of which at seven per cent. will be £840;" "that the rent of the rooms, over and above what will be necessary for the accommodation of the President and Professors, at 80*s*. per annum for each student will be £120;" and they hope therefore "the future income of Columbia College may be estimated at £1200 per annum." They further reported "that from the deranged state of and great losses which the funds of Columbia College have sustained, they do not think the Regency have it at present in their power to offer such a salary as will be an inducement to a respectable character to accept the office of President"; that they had arranged with the Professors in the Faculty of Arts to "execute the office of President for one year by monthly rotation," and had appointed Mr. John Kemp to be teacher of Mathematics for one year with the salary attached to the Professorship. They advised the Regents that the plan of tuition and discipline should be published and to it annexed an address to the public "explanatory of their Institution, representing the losses of Columbia College and the deranged state of its funds, and requesting the aid of the public by voluntary subscriptions to carry their plan into full execution," and that "an application be made to the Legislature to grant them an aid by a tax on marriage licenses or any other mode they may think proper."

It does not appear that the plans of the Regents for obtaining financial aid by voluntary subscription or legislative grant were successful. The only recorded bene-

1786 faction is a bequest, left by Major Edward Clarke in 1785, of £1000 sterling to be expended in the purchase of books for the College Library.

Two classes were graduated under the auspices of the Regents — the class of '86 and that of '87. A committee of the Regents, especially appointed for the purpose, superintended these Commencements, and presented each student, admissible to the degree of Bachelor of Arts, instead of a diploma, "with a certificate under the seal of the corporation signed by the Secretary, certifying that he is entitled to the degree of Batchelor of Arts to be conferred as soon as a President shall be appointed for Columbia College." The certificates then given were, in 1788, replaced by diplomas in due form, bearing date, respectively, April 4, 1786, and April 5, 1787.

The following is an account of the first Commencement of Columbia College under its new name given in the *New York Journal* or *Weekly Register* for April 13, 1786: —

"On Tuesday last (11th) was held the first Commencement of Columbia College: and the public, with equal surprise and pleasure, received the first fruits of reviving learning, after a lamented interval of many years.

"The Honorable the Continental Congress, and both Houses of the Legislature suspended the public business, to support the important interests of Education by their countenance, and grace the ceremony by their august presence. The procession moved from College Hall about an half an hour after eleven in the forenoon, in the following order: [The order is then given.]

"When they arrived at St. Paul's Church, the place appointed for their graduation, the Reverend Mr. Provoost introduced the solemnity of the day by performing Divine Service.

"Mr. Cochran, Professor of the Greek and Latin Languages, was appointed to call up the speakers in their proper order.

"Mr. De Witt Clinton, the first candidate who spoke,

addressed the audience in an elegant Latin oration, *De* 1787
utilitate et necessitate studiorum artium liberalium, which he finished with a polite and well adapted salutation, in the same language, to the Members of Congress and of the Legislature ; to the Regents and Professors, and to the audience at large."

A list of other speakers follows, and the whole concludes : —

"We do not remember ever to have seen such a concourse of people as met upon this auspicious occasion, who seemed universally delighted with the performance of the candidates, equally honorable to the teachers and themselves."

The Regents found by experience that the amendatory act of November 26, 1784, had not overcome the difficulties under which they labored in the administration of their trust. In April, 1786, a committee was appointed to consider the matter and report measures of relief. Again, in January, 1787, a committee, of which Mayor Duane was chairman, was instructed "to take into consideration the present state of the University and to report as soon as possible the measures necessary to be adopted to carry into effect the views of the Legislature with respect to the same and particularly with respect to Columbia College." This committee, on the 15th of February, reported, among other things, "That each respective College ought to be entrusted to a distinct corporation with competent powers and privileges," and submitted the draft of a bill for effecting the changes suggested in the report. This draft was referred, on March 8, to a committee consisting, among others, of the Speaker of the Assembly, the Mayor of New York, John Jay and Alexander Hamilton, "to consider of the most proper means for procuring an Act of the Legislature for amending the Charter of the University, either in conformity to the bill directed to be presented by the resolution of the

1787 Board of the fifteenth of February last or with such alterations as may be found necessary." This committee prepared a bill for submission to the Legislature, and the Legislature, on the 13th of April, 1787, passed "An Act to institute an University within this State and for other purposes therein mentioned."

The Act provides for the establishment of a University to be called and known by the name or style of "The Regents of the University of the State of New York" and creates the Regents a corporation, with power to visit and inspect all the Colleges, Academies, or Schools which are or may be established in the State, to confer diplomas, and to grant charters; revives and confirms the original Charter of King's College with amendments abolishing *ex officio* membership of its governing body, cancelling the requirements that the President should hold a certain form of religious belief, and that a certain form of prayer should be used in the morning and evening services of the College; ordains that the College "shall be henceforth called Columbia College" and "that the style of the said corporation shall be the Trustees of Columbia College in the City of New York"; names a body of twenty-nine Trustees and vests in them "all and singular the power, authority, rights, privileges, franchises and immunities," "excepting as before excepted," and "all and singular the lands, tenements, hereditaments and real estate, goods, chattels, rents, annuities, moneys, books and other property," whereof the Governors of King's College were possessed or entitled by virtue of the original Charter, or with which the Regents of the University were invested by the Acts of 1784 for the benefit of Columbia College. The body of Trustees named in the Act, after it became reduced to twenty-four "by the death or resignation or removal of any" of its members, was made a self-perpetuating body. Under this government the College has since remained.

CHAPTER VII

1787–1800

PRESIDENT WILLIAM SAMUEL JOHNSON

THE Trustees named in the Act met at the Exchange in the city of New York on Tuesday, May 8, 1787, with the Hon. James Duane, as Chairman, and completed their organization by the election of Robert Harpur, as Secretary, and Brockholst Livingston, as Treasurer. Mr. Harpur had been Professor in King's College, 1761–1767 ; Mr. Livingston, who served the College well as Trustee and Treasurer from its reorganization in 1784, till his death in 1823, and was for the last seven years of his life Chairman of the Trustees, was the son of William Livingston who so bitterly opposed the granting of a Charter to King's College in 1754.

During the month of May, Professors Kunze, Bard, and Romayne resigned their offices, so that there were, practically, when the Trustees assumed charge — in the Faculty of Medicine, three Professors : Dr. McKnight, Anatomy and Surgery ; Dr. Crosby, Midwifery ; Dr. Kissam, Institutes of Medicine — in the Faculty of Arts, three Professors : Mr. Cochran, Greek and Latin Languages ; Dr. Kemp, Mathematics ; Rev. Dr. Gross, Geography and German. Of Dr. Gross's instruction in Geography the following notice is interesting : —

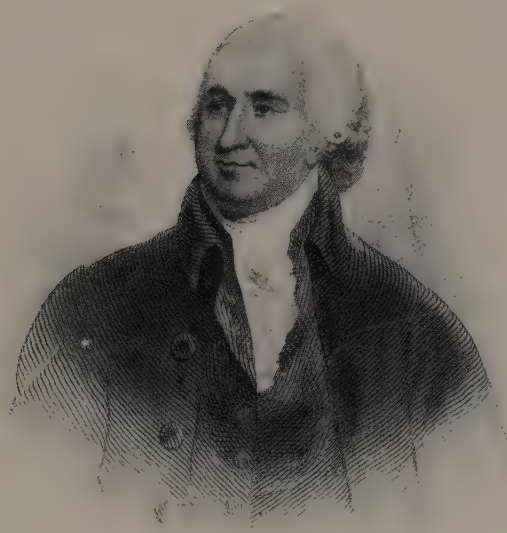
"After the Revolution, Columbia College, having dropped its royal name and patron as well as its Tory President and Tory Professor of History, took a fresh start under American auspices. An old broadside, preserved in the Columbia Library, contains the statutes of the College for 1785, and a 'Plan of Education,'

1787 whereby it appears that history was taught in what was then a unique way for America. The Rev. John Daniel Gross, Professor of German and Geography, from 1784 to 1795, taught the Sophomore Class three times a week, in a course which was characterized as a 'Description of the Globe in respect of all general matters. Rise, extent, and fall of ancient empires; chronology as low as the fall of the Roman Empire; present state of the world; origin of the present States and Kingdoms — their extent, power, commerce, religion, and customs; modern chronology.' This was history with an ancient and geographical basis, but with a modern political outlook. It was a highly creditable course, the best that the writer has found in the annals of any American College, at that early period. It savors, however, more of German than of English origin. John Gross, Professor of German and Geography, and afterward of Moral Philosophy, evidently represents a European current in American College instruction. He was the forerunner of Francis Lieber, the German American."[1]

On the 21st of May, William Samuel Johnson, LL.D., was unanimously elected President of Columbia College, and on the 12th of November following signified his acceptance.

Dr. Johnson was the son of the Rev. Dr. Samuel Johnson, first President of King's College. He was graduated Bachelor of Arts from Yale College in 1744, and received from Harvard, three years later, the degree of Master of Arts. He was bred to the law and early achieved a commanding position in the profession. He repeatedly represented his county in the Colonial Assembly of Connecticut, and in 1765 was a delegate from Connecticut to a Congress of Colonies held in New York. He was, in 1766, selected as special agent of Connecticut to the Court of Great Britain to manage a case of great importance, involving title to a large tract of land and

[1] *The Study of History in American Colleges and Universities.* Herbert B. Adams, Ph.D., Asso. Prof. Hist. Johns Hopkins. Bureau of Education, Circular of Information, No. 2, p. 60, 1887.



JAMES DUANE

Chairman of the Trustees, 1787–1795

"even the chartered rights" of the Province. He spent 1787
nearly five years in this enterprise. While in England he enjoyed the companionship and friendship of some of the foremost men of the time — among others, of Archbishop Secker of Canterbury, of Lord Mansfield, and of the great lexicographer, Samuel Johnson, who wrote him a letter, under date of March 4, 1773, beginning, "Of all those whom the various accidents of life have brought within my notice, there is scarce any man whose acquaintance I have more desired to cultivate than yours." After his return he filled, successively, the offices of Judge of the Superior Court of Connecticut, member of the Council of Connecticut, Representative in Congress, in which office he continued till he was chosen a delegate to the Convention which framed the Constitution of the United States. Not long after his acceptance of the presidency of Columbia College, in January, 1788, he was chosen United States Senator from Connecticut under the new Constitution. "To him and his colleague, Oliver Ellsworth, was committed the important duty of framing a judiciary system for the United States, and the bill which they reported was adopted with little alteration." He combined the duties of the presidency and the senatorship till the sittings of Congress were removed from New York to Philadelphia, when he resigned the senatorship.[1] He continued President of the College till 1800, and conducted the office with dignity, usefulness, and honor.

From the report of a committee on the state of the College made November 26, 1787, it appears that — twenty-four of the twenty-nine gentlemen named as Trustees in the Act of 1787 accepted the office: Dr. Johnson as President received a salary of £400; Dr. Gross received no salary as Professor of German and Geography, but as temporary instructor of Moral Philos-

[1] President Moore's *Historical Sketch* and Beardsley's *Life of Samuel Johnson.*

1787 ophy he received £50; Mr. Cochran received £100 as Professor of Latin and £100 as Professor of Greek; Dr. Kemp received £200 as Professor of Mathematics and £50 additional as temporary instructor in Natural Philosophy. These salaries with payments to the steward and other under offices amounted to £972 per annum. The Professors in the Faculty of Medicine received no salaries. The number of students was 39, distributed as follows: Freshmen 18; Sophomores 7; Juniors 10; Seniors 4; of whom five slept and boarded in the College building, and 34 in the City. The President, Professors, and students wore no gowns. There were no suitable apartments for the use of the classes. The tuition money and chamber rent were not ascertained further than that neither should exceed that paid for a like purpose by the College of New Jersey. There was scarcely any library. The College had property consisting of 91 lots, of which 78 were rented on leases for £447 11*s.* per annum; bonds reckoned good to the amount of £12,633 10*s.* 8*d.*, on which the annual interest was £880 6*s.* 2*d.*, and the amount of interest due was £2345 8*s.*; bonds reckoned bad to the amount of £2304, on which there was interest due amounting to £1885 9*s.* 7*d.* The whole annual income of the College was £1331 17*s.* 2*d.*, and the amount then in the hands of the Treasurer was £614 8*s.* 6*d.* At several successive meetings in the month of December, it was determined that President Johnson should give instruction in Rhetoric and Logic (in which department there was no Professor), and that he should receive £50 per annum for the service; that the President and the Professors should be recommended to wear gowns; that the Professors be requested to attend prayers punctually in the College Hall; that each student should pay the President and each Professor or teacher whose course he attended $5 per annum; that the Treasurer should receive £30 per annum and the Secretary £25; and

that the Statutes should be revised. Professor Gross was 1789
made Professor of Moral Philosophy, which subject he had taught as temporary instructor from his first connection with the college.

In 1788, the students were allowed, on their own petition, to wear gowns, and in the following year the President and Professors were authorized to require them to wear gowns "in such cases and under such penalties as they may judge proper."

It may be of interest to note here, that, of the students entering the freshman class in 1788 were John Randolph, afterward celebrated as of Roanoke, and his brother Theodoric. It appears from the Matricula that both were promoted to the sophomore class in 1789, and that John became a member of the junior class in 1790 but left some time during that year.

On April 9, 1789, Peter Wilson was elected Professor of the Latin and Greek Languages, in place of Mr. Cochran who had resigned. The Professor of Mathematics and Natural Philosophy was authorized to give instruction to the students in the manner proposed by him in the following plan: —

Freshman Class. — *Twice a Week.* — Extraction of the Roots; Algebra as far as Cubic Equations.

Sophomore Class. — *Three times a Week.* — Euclid's Elements; Plain Trigonometry, its application to the mensuration of heights and distances, of surfaces and solids; Land surveying; Navigation, etc.

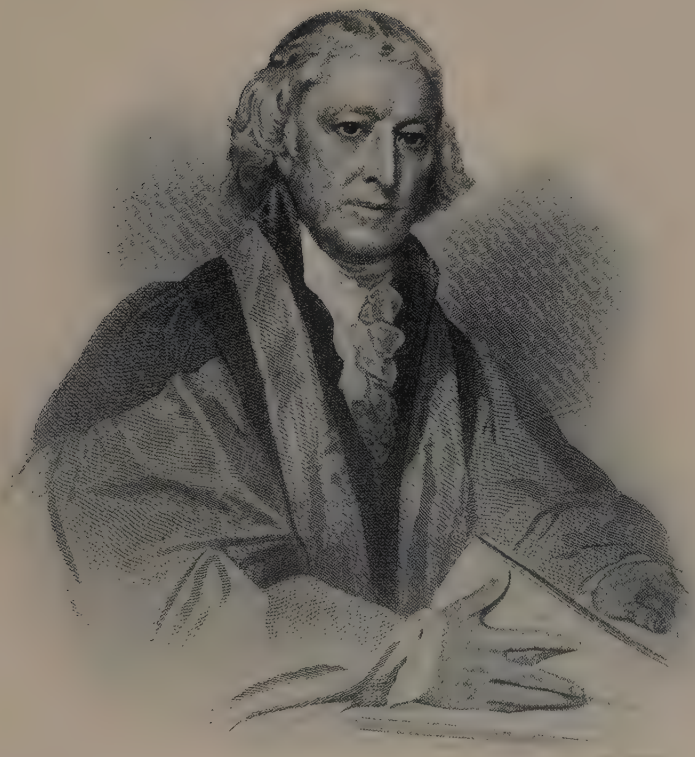
Junior Class. — *Once a Day.* — Conic Sections and other Curves; Projection of the Sphere; Spherical Trigonometry, its application to Astronomy; the higher parts of Algebra; the application of Algebra to Geometry; General Principles of Fluxions.

Senior Class. — *Once a Day.* — General properties of Matter; Laws of Motion; Mechanical Powers; Construction of Machines; Hydrostatics; Hydraulics; Pneumatics; Optics; Astronomy; Electricity and Magnetism.

1789 On the 30th of April, 1789, the Hon. Robert R. Livingston, class of '65, King's College, Chancellor of the State of New York, administered the oath of office to, and proclaimed, George Washington President of the United States of America. The spot on which this ceremony took place is marked by a statue of Washington in front of the United States Sub-Treasury in Wall Street, New York. The President, the Vice-President, and the Houses of Congress then proceeded to St. Paul's Chapel, where divine service was performed by the Right Rev. Dr. Provoost, class of '58, King's College, Bishop of New York and Chaplain to the Senate. On the 6th of May following was held, in St. Paul's Chapel, the Annual Commencement of Columbia College, which was graced by the presence of President Washington, Vice-President Adams, the Senate and House of Representatives of the United States, and of the Governor and principal officers of the State of New York. The College had, through its alumni, been of signal service in bringing about the independence of the country and the establishment of its government upon a sure constitutional foundation, and one of the earliest acts of the new government was this tribute of honor to the College.

In the latter part of April, 1791, the Trustees appointed a committee to prepare a plan for teaching in the College the science of medicine, and to report it without delay. Soon afterward, on May 2, the Committee reported that it would be "proper at present to have Lectures in Chemistry, Anatomy and the Practice of Physic read in Columbia College and that Dr. Romayne (who already has a very considerable number of pupils under his tuition and has been in the habit of teaching) be nominated Lecturer in those Branches." Dr. Romayne was, on May 5, appointed Lecturer.

The Trustees proceeded steadily in their endeavors to rehabilitate the College and make the course of instruction



WILLIAM SAMUEL JOHNSON, J.C.D. (OXON.), LL.D. (YALE)
President, 1787–1800

as complete as possible. They were encouraged by the favor of the Legislature and aided by grants of money for the purchase of books and scientific apparatus, for buildings, and the salaries of Professors. By "an Act for the further encouragement of Literature" passed March 31, 1790, the Legislature authorized and empowered the Regents of the University to take possession of certain lands and tenements and apply the revenue from them for the better advancement of science and literature in Columbia College and the Academies incorporated or to be incorporated by the Regents; and, further, granted for immediate use the sum of £1000. One moiety of the sum appropriated was devoted to the use of the College to relieve its more pressing necessities. 1792

"An Act to encourage Literature, by Donations to Columbia College and to the several Academies in the State," passed April 11, 1792, granted to the Trustees of the College: £1500 to enlarge the Library; £200 for a chemical apparatus; £1200 to build a wall to support the grounds of the College; £5000 to erect a hall and an additional wing pursuant to the original plan of the College; £750 annually for five years for salaries of additional Professors, which annuity was continued for two years longer (seven years in all) by an Act passed April 17, 1796.

In June, 1792, a committee of the Trustees, appointed in the preceding April "to see what additional Professorships are wanting in this College and what salaries can be allowed for their support," reported that there were needed the following Professorships: Law; Ancient and Modern History; Natural History, Chemistry, Agriculture and other Arts depending thereon, annual salary £200; Oriental Languages, salary £100; French Language, salary £100.

The report was agreed to, and it was resolved that the Professor of Oriental Languages should be at liberty to instruct his students but three days in the week and at his

1792 own house, for which he be entitled to receive from each student "the usual fees of forty shillings per annum"; that the Professor of French should "teach such of the students of the College as choose to be instructed in that Language" at such times as might be agreed upon by the Board of President and Professors, the fee for each student to be forty shillings; that the Professor of Natural History, etc., should, during the sessions of the College, daily attend his Lectures there, Saturdays excepted, the fee to the Professor from each student to be forty shillings per annum. "The schedule or sketch of this Professorship (Natural History, etc.) to comprehend the Philosophical Doctrines of Chemistry and Natural History under the following Heads: 1. Geology, or the natural and chemical History of the Earth; 2. Meteorology, or the natural and chemical History of the Atmosphere; 3. Hydrology, or the natural and chemical History of Waters; 4. Mineralogy, or the natural and chemical History of Fossil Substances; 5. Botany, or the natural and chemical History of Plants; 6. Zoölogy, or the natural and chemical History of Animals. The course to be so arranged with the Professor of Mathematics and Mechanical Philosophy as to form a complete set of doctrines and facts in the department of experimental Physics."

At the next meeting of the Trustees, July 9, three of the Professorships were filled by the election of Dr. Samuel Latham Mitchill, Natural History, etc.; Rev. Dr. Johann C. Kunze, Oriental Languages, and Mr. Villette de Marcellin, French Language. At this meeting it was "Ordered that every Professor of this College who teaches by Lecture do publish within one year a Syllabus of his Course of Lectures — and that such as teach by recitation and examination publish a plan of their courses, both to be so constructed as to point out the Time employed and number of Lectures given in each."

In December of the following year, the Professorship

of Law was filled by the election of James Kent, subse- 1794
quently the celebrated Chancellor of New York, whose appointment was the forerunner of the Law School.

In July, 1794, Professor Mitchill, on behalf of a committee appointed for the purpose, made report to the Senatus Academicus of "the present state of Learning in the College, collected from written statements handed in by the Professors." This report was sent to the Regents of the University, and by them submitted to the Legislature with their report made in 1795. (A copy of the pamphlet is in the Library of the University.)

The presentation begins with the statement "The College consists of two Faculties; 1. The Faculty of Arts, composed of the President and seven Professors; and, 2. The Faculty of Physic, comprehending the Dean and seven other Professors." The plan of instruction follows: —

President Johnson was Lecturer in Rhetoric and Belles-lettres, and instructed the students in the grammar and proper pronunciation of the English Language. He so conducted his course "as to comprehend, as far as possible, a complete course of instruction in the Origin, Nature and Progress of Language in general, and of the English Language in particular; in the art of writing and speaking it with propriety, elegance, and force — the rules and principles of every species of eloquence — the principles of true taste and the rules of just criticism, whereby the students may be enabled to judge properly of each species of composition in every branch of elegant literature."

Professor Gross taught Moral Philosophy. "The system of that science in Columbia College comprehends an *Introductory Treatise* on the different states and conditions of man — the nature of man — the powers and faculties of the human mind which distinguish him from the rest of animated nature on earth; as a moral agent accountable to God and his fellow-creatures for his actions

1794 and the use of those powers. — Then follows a threefold division of the course: 1. The first explaining the Principles and Laws resulting from the nature of man, and his natural relations to God and his fellow-creatures, by which human conduct ought to be regulated in a manner becoming the dignity of human nature, and conformable to the will of God. This constitutes the 'Law of Nature' strictly so called." "2. In the second part of the system, those general principles are applied to the different states, relations, and conditions of man, comprehending (*a*) ethics. . . . (*b*) Natural Jurisprudence." Rights in Things; Rights of Persons; Civil Government. "3. The Law of Nations, as founded in nature, makes the third part."

John Kemp, LL.D., was Professor of Mathematics. The course given by him was fairly extensive, embracing Arithmetic taught "in a scientific manner," Algebra including the higher branches, Trigonometry, Land Surveying and Navigation, Euclid, the doctrine of chances and annuities, application of Algebra to Geometry, and the Doctrine of Fluxions.

"There is also a Professorship of Natural Philosophy and Astronomy in the College. This course is divided, by John Kemp, LL.D., the Professor, into, 1. Mechanics, strictly so called; 2. Hydrostatics; 3. Hydraulics; 4. Pneumatics; 5. Optics; 6. Electricity; 7. Magnetism; and, 8. Astronomy."

"The College is provided with an elegant and extensive apparatus for Mechanical Philosophy and Astronomy. There are about six hundred experiments performed each year during the course. — Young gentlemen may attend any or all of the Mathematical classes, as well as the Natural Philosophy and Astronomical class, without regularly entering the College, or being subjected to any other regulations of the College than relate to those classes respectively."

The Rev. Elijah D. Rattoone was Professor of the

Greek and Latin Languages, in which a thorough and 1794
extended course was given. Mr. Rattoone also filled the Professorship of Humanity, which was established May 7, 1794. In this subject he delivered a regular course of lectures on "Humanity; including the opinions of the ancient philosophers; the religion, government, laws, policy, customs, and manners of Greece and Rome: the whole designed to explain and elucidate ancient learning, and to facilitate the acquisition of liberal knowledge.

"In short, the object pursued is to make critical and useful scholars — to infuse, from those learned languages, a true taste for propriety and correctness — to teach the value of those tongues which never change nor vary, which the Professor considers as the true standards of excellence in language, and as containing generally whatever is just in thought, elegant in expression, and harmonious in numbers."

"John Christoff Kunze, S.T.D., is the Professor of Oriental Languages, and assists the Students of Divinity, of all denominations, in their pursuits to acquire a competent knowledge of the original language of such documents of revealed religion as belong to the Old Testament. He teaches the graduates and undergraduates of Columbia College, and others who apply for the purpose, at such hours as do not interfere with the usual lecture hours of College." "As he found it difficult to procure a printed grammar in sufficient numbers in this country, and the use of different grammars would retard the progress of the students, he has brought all that is necessary and essential into the small compass of four sheets, of which each of his hearers, by degrees, takes a copy; and he flatters himself, that his method hitherto has proved more compendious and more advantageous than that generally pursued. Only a few of the principal rules are to be gotten by heart, and the rest are rendered familiar by the practice."

1792 "A Professorship of Economics was instituted in July, 1792, and Samuel Latham Mitchill, M.D., appointed Professor. This course, of which a Syllabus is published, is conducted upon the *new French* system. A few weeks ago, Mr. Mitchill gave an edition of the New Nomenclature of Chemistry, in French, German and English, for the use of the students. This Professorship comprises not only the classification and arrangement of natural bodies, but also treats of a great variety of facts which form the basis of Medicine, Agriculture, and other useful arts, as well as of manufactures."

Any gentleman might attend the class in Chemistry, without regularly attending College; and there was said to be "a handsome apparatus belonging to this department and a considerable collection of fossils."

"The Professorship of the French Tongue" was held by Antoine Villette Marcellin. His courses, though particularly intended for the College students, were open to other persons.

"A Professorship of Law was instituted in December, 1793, and James Kent, A.M., appointed Professor. Mr. Kent having been so recently appointed, has not as yet entered upon a course of lectures. . . ."

Encouraged by the appropriations referred to as made by the Legislature, the Trustees continued the appointment of additional Professors by the election, in 1795, of the Rev. Dr. John McKnight as Professor of Moral Philosophy (Dr. Gross had resigned) and Logic, and of the Rev. Mr. John Bisset, Professor of Rhetoric and Belles-lettres. They also proceeded with the building of an additional wing as provided for in the Act of 1792. They found, however, that their plans were more extensive than their means would allow, and in 1796, having failed in their application to the Legislature for additional aid, they were obliged to suspend their building operations. In 1797 the Legislature granted $500 for the preservation

and care of the Anatomical Museum. In 1799 the annual grant by the State of £750, for the payment of salaries, expiring by limitation, the Trustees committed the teaching of Rhetoric and Belles-lettres, with Logic and Moral Philosophy, to the President; united in one Professorship the Latin and Greek Languages, Roman and Grecian Antiquities; combined in another, Mathematics, Natural Philosophy, and Geography; and discontinued the Professorships in Oriental Languages, in French, and in Law. A Professorship of Natural History and Chemistry was instituted as part of the regular academical studies. 1800

On the 16th of July, 1800, Dr. Johnson presented his resignation as President, which was accepted, and it was resolved that a letter of thanks be addressed to him "for his long and faithful services in this Institution."

On retiring from the presidency, Dr. Johnson took up his residence in Stratford, Connecticut, where he lived to enter upon his ninety-third year, "retaining to the last his vigor and activity of mind, the ardor of his literary curiosity, and a most lively interest in whatever concerned the welfare of this country, and of the Christian world."[1]

The vacancy in the presidency continued a year, during which time Professors Kemp and Wilson appear to have discharged the duties of the office.

[1] President Moore's *Historical Sketch.*

CHAPTER VIII

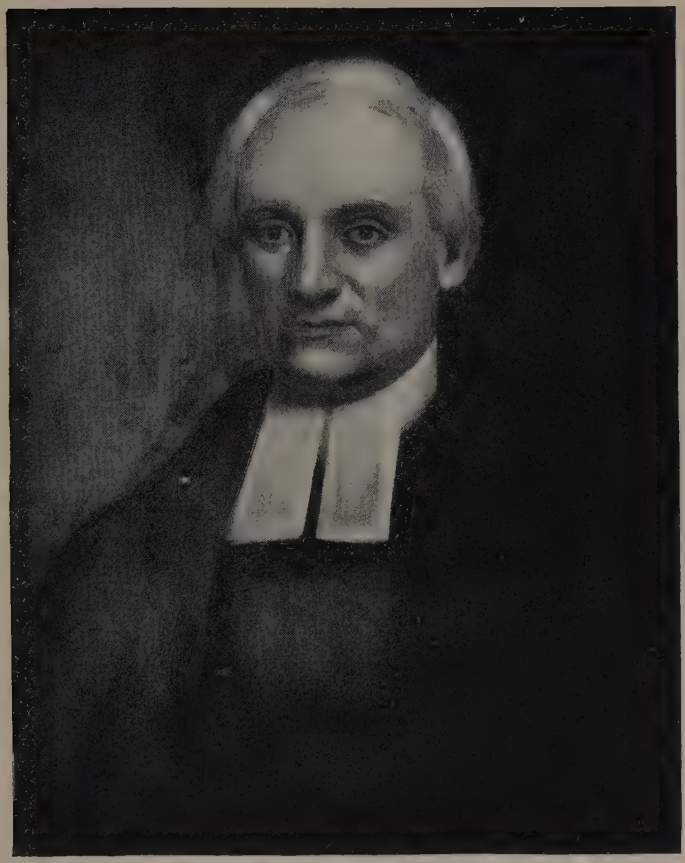
1801–1811

PRESIDENTS CHARLES H. WHARTON AND BENJAMIN MOORE

On May 25, 1801, the Rev. Dr. Charles H. Wharton, Rector of St. Mary's Church, Burlington, New Jersey, was elected President, signified his acceptance early in the following August, and resigned the office December 11 of the same year. There is no record in the minutes of the Trustees of his having rendered any collegiate service, though Bishop Doane, in a notice of him, speaks of his having presided at the Commencement. His acceptance of the presidency of the College did not sever his connection with St. Mary's Church, of which he continued to be Rector till his death on July 23, 1833.

A Committee appointed to "consider and report respecting the office of President" reported on December 30, "That the Professorship which is annexed to the office of President be detached from it; that the President be charged merely with a general Superintendence of the Institution, including attendance on public Examinations of the students, the presiding at Commencements, and performing the services usually here performed by the President; and that there be a distinct Professor of Moral Philosophy, Rhetoric and Belles-lettres and Logic."

On the day following this report, the Right Reverend Benjamin Moore, of the class of '68, Bishop of New York, who had been President *pro tempore* after the flight, in 1775, of President Cooper, and was Professor of Rhetoric and Logic in the College 1784–1787, was elected Presi-



CHARLES H. WHARTON, S.T.D.
President, 1801

dent, and the Rev. Dr. John Bowden, of the class of '72, 1802
was made Professor of Moral Philosophy, Rhetoric, and Belles-lettres and Logic.

The Professorship of Chemistry having become vacant by the election of Dr. Samuel L. Mitchill to the House of Representatives in 1801, and his entrance upon his duties, Dr. James S. Stringham was elected to the chair, November 18, 1802. The condition of the funds of the College did not allow of a salary to him, but the Trustees directed "that either the Junior or Senior Class at the Election of the Faculty of Arts be directed to attend on the Lectures of the said Professor and each student to pay him for the Course Eight Dollars, for which sum he shall have the Privilege of attending Two Years."

The Trustees were very much hampered in their efforts by a lack of funds. Appeals to the Legislature for further aid were unsuccessful. From a report of Committee, made November 17, 1802, it appears "that the whole permanent Revenue of the College does not exceed One Thousand, Five Hundred and Seventy Pounds per annum, and that the stated regular annual salaries to the officers thereof" amount to "Fourteen Hundred and Seventy Seven Pounds; leaving a Balance for contingent Expenses and Repairs of Ninety Three Pounds."

Some addition to the property of the College resulted from the cession, in 1802, to Columbia, jointly with Union College, by the Regents of the University, of certain lands in northern New York, at Lake George, Ticonderoga, and Crown Point. Building operations were resumed and continued so far as to complete the hall and recitation rooms on the north end of the new foundation. On August 5, 1805, the Trustees "Resolved that the Treasurer be, and hereby is requested to lay before this Board, with all convenient Speed, a Schedule of the whole real and personal Property of Columbia College, specifying the several Lots or Portions of Ground, with the Rent

1802 charged on each, the Date and Expiration of the Leases: and the Conditions upon which they have been granted: and also to annex to the said Schedule a View of the Debts due from the Corporation: and of its annual Expenditure." The Treasurer's report was made on the 14th of the following December. From this it appears that the real property consisted of: The grant made by Trinity Church to the College, May 13, 1755, of that portion of the King's Farm described as "situate, lying and being on the West side of the Broadway in the West Ward of the city of New York, fronting Easterly to Church Street, between Barclay Street and Murray Street, 440 feet, and from thence running Westerly between and along said Barclay Street and Murray Street to the North River."

The grant made by the city of New York to the College, August 16, 1770, "at the annual Rent of One Pepper Corn, all the Waste Ground, Soil and Water Lots situate, lying and being in the Rear of the aforesaid Ground, and contiguous thereunto next to the Hudson's River, containing the Whole Breadth of the said Ground 440 feet English Measure, and in length from the Rear of said Ground to low Water Mark into Hudson's River aforesaid, and from thence to extend the whole Breadth thereof into Hudson's River aforesaid Two Hundred feet."

And the personal property consisted of: Fifteen bonds, accounted good aggregating £14,470 16*s*. 1*d*. Four bonds, accounted bad aggregating £2020. One bond in dispute, and, therefore, of uncertain value.

That of the King's Farm lots, fifty-eight were leased at rents aggregating annually £395 2*s*. 3*d*.

That two of the water lots were leased for sixty-three years from March 25, 1782, at an annual rental of £8; and that the remaining water lots were leased in perpetuity at an annual rental of £158 12*s*. 9*d*.

That the annual income from the bonds was £997

2*s*. 3*d*. ; and that the total income from bonds and rents 1807
was £1558 17*s*. 3*d*.

That the salaries paid were: the President, £100 ; Dr. Kemp, £500 ; Dr. Wilson, £400 ; Dr. Bowden, £400 ; Dr. Beach (Secretary of Trustees), £25 ; the Porter, $52 ; total £1447.

That the only debt of the corporation was one for $5000 "borrowed by order of the Board for building a Hall and Lecture Rooms. . . . This Debt will be extinguished in a very few years from the increased Revenue which must immediately arise from Ground Rents, and which may be fairly estimated at One Thousand Pounds per Annum."

In this schedule, no mention is made of the lands held by the College jointly with Union College. It appears from a minute made January 20, 1807, that a committee of the Trustees was appointed to act with a similar committee from Union College to sell the lands at Lake George, Ticonderoga, and Crown Point "for such Prices and on such Terms of Credit, and in such manner as the said joint Com^tee^ shall judge most eligible." It was subsequently reported to the Board, April 10, 1810, that Mr. James Caldwell, of Albany, had offered $5000 for the lands at Lake George, "known as Garrison lands," and the Trustees resolved to "accept of the offer for their part of the said Lands." A little more than a year afterward, in June, 1811, a deed of the lands was given to Mr. Caldwell. (Hence, presumably, "Caldwell's Landing" on Lake George.) The lands at Ticonderoga, with the exception of eight acres, were sold in 1820, and the remainder in 1823, bringing a sum total of $3244.80 ; the lands at Crown Point were finally disposed of in 1828, at $10 an acre, for $3213.34.

"Certain restrictions and defects" in the Charter had become evident by experience, and the Trustees, in February, 1807, applied for remedial legislation. The Legisla-

1807 ture proved unwilling to grant relief in the form proposed. The bill submitted "provided that in case of the vacancy of the seat of any of the Trustees of the said College, it shall be the duty of the Trustees to state such vacancy to the Regents of the University, and that it shall be the duty of the Regents to appoint a proper person to supply the same." Chief-Justice Kent objected to this provision, and his objection was sustained by the "Council of Revision" at Albany, "as inconsistent with the spirit of the Constitution and the public good," inasmuch as it "is contrary to a privilege and immunity granted to the said College by its charter of the 31st of October, 1754 [which had been fully and absolutely ratified and confirmed by the Legislature], which authorizes the Trustees to fill up such vacancies whenever the same should occur; and it appears by the representations of the Trustees, that the said alteration is made without the consent of the corporation." It was not until March 23, 1810, that an approved amended Charter was obtained. The immediate incitement to this Act was an appeal made to the Legislature by the Trustees to be liberated "from the very inconvenient restrictions of their actual Charter, which long experience has ascertained to be many ways injurious, and no way profitable to the College. One of the most hurtful is their incapacity to lease their lands in the city of New York for a term longer than twenty-one years. This disability both depreciates the value of their property so as essentially to affect their resources, which are but moderate at the utmost; and also to preclude the possibility of improvements much needed and desired in that central part of the city where their lots lie."

While the efforts for amendment of the Charter were being made, a revision of the whole scheme of education and discipline in the College was in progress. A committee was appointed February 1, 1808, to inquire into the present state of education in the College and to "report

their opinion generally as to the measures proper for carrying into full effect the design of the Institution." 1808 This committee consisted of the Hon. Rufus King, whom Washington had sent, in 1796, Minister Plenipotentiary to Great Britain, and who had distinguished himself in his eight years tenure of that office, the Rev. John Henry Hobart, subsequently the distinguished Bishop of New York and a founder of the General Theological Seminary of the Protestant Episcopal Church in New York, the Rev. John M. Mason, a great pulpit orator, sometime Provost of Columbia College and President of Dickinson College, the Rev. Samuel Miller, afterward Professor of Ecclesiastical History and Church Government in the Theological Seminary at Princeton, New Jersey, and a voluminous writer, and the Rev. Dr. John N. Abeel. So far as the "present state of education" was concerned, it would appear that the Faculty had become somewhat lax in enforcing the requirements for admission, or that there had grown up a belief to that effect, for, on October 15, 1808, the Trustees adopted a stringent resolution of direction to the Faculty and ordered the Clerk of the Board "to insert in one or more of the daily Papers printed in this City the following Advertisement: The Board of Trustees of Columbia College finding it to be commonly reported and believed that Students may be admitted into the College with less qualifications than are prescribed by the Statutes; and wishing to arrest the progress of an opinion injurious to the Reputation of the Seminary, and of which the effects may be fatal to the solid education of many Youth; do hereby inform the Public that no part of the said Qualifications can be dispensed with, and that no Student will hereafter be admitted who shall not be well prepared in all the parts thereof."

As to "the measures for carrying into full effect the design of the Institution," the committee deliberated a year, and presented, February 1, 1809, a report which was

1809 printed for the use of the Trustees and the Faculty of Arts. The Faculty deemed the report an arraignment of their conduct of the entrance examinations and of the course of study, and made a dignified, able, and somewhat caustic reply. The subject was further considered and, in July, resulted in the adoption of the following resolutions : —

"Resolved : That from and after the first Day of October, 1810, no student shall be admitted into the lowest Class of the College, unless he be accurately acquainted with the Grammar, including Prosody, of both the Greek and Latin Tongues ; unless he be master of Cæsar's Commentaries ; of Cicero's Orations contained in the Volume in usum Delphini ; of Virgil's Æneid ; of the Greek Testament ; of Dalzel's Collectanea Minorâ ; of the first four Books of Xenophon's Cyropœdia, and the first Two Books of Homer's Iliad. He shall also be able to translate English into grammatical Latin ; and shall be versed in the first four Rules of Arithmetic, the Rule of Three direct and inverse, and decimal and vulgar Fractions. The classical Examinations to be ad aperturam Libri.

"Resolved ; That no Student shall be admitted into any of the higher Classes without an exact knowledge of those Studies which belong to the Classes below."

By comparing with these requirements, those for admission adopted in 1785 and in force up to this time, it will be seen what advance was made. The Statutes of 1785 ordained "No candidate shall be admitted into the College, after the second Tuesday in April 1786, unless he shall be able to render into English Cæsar's Commentaries of the Gallic War ; the four Orations of Cicero against Catiline ; the four first books of Virgil's Æneid ; and the Gospels from the Greek : And to explain the government and connection of the words, and to turn English into grammatical Latin, and shall understand the four first rules of Arithmetic, with the rule of three."

The same committee, to which the Rev. Dr. John Brod- 1810
hed Romeyn was subsequently added, was requested "to report a System of Discipline as well for inciting to laudable Emulation, as for preventing and punishing of Faults, to be conducted upon a Principle of a Regard to Character; and that the Com^{tee} revise the existing Statutes as far as may be necessary for carrying that System and the aforegoing Resolutions into effect." This committee presented, February 28, 1810, with their system of discipline and revision of the Statutes, a very able report giving their views upon the primary principles of education and the proper mode of applying them. The exposition was, in part, as follows: —

"It appears to your Committee that the primary principle of all sound education, viz. *the evolution of faculty and the formation of habit*, although deplorably neglected in most seminaries, ought to be so thoroughly incorporated in the College system, and even amalgamated with its very elements, as to render progress through the classes, without due regard to it by both teacher and pupil, altogether impracticable. If the plan be so constructed as to require ability and diligence, the want of either of these qualifications in the teacher will betray itself in the embarrassment of his department: and the want of either of them in the pupil will be discovered by his habitual failure in duties which a reasonable share of both would have fitted him to perform. Your Committee cannot, for a moment, suppose, that it is the intention of the Board to try that most fruitless and mischievous experiment — the experiment of educating either the naturally stupid, or the incurably idle. A volume could not display the magnitude of the injuries inflicted upon letters, upon religion, upon morals, upon social prosperity under every form, through the protection granted to incapacity and sloth, by a timid indulgence, or a chimerical hope. It is, therefore, indispensable that the public should see, and youth themselves feel, that future students must both have faculties to cultivate, and industry to labor in their cultivation, or that Columbia College will be no place for them.

"With a sufficient reserve for improvements which the

1810 vigilance of skilful instructors may point out in the practical details, your Committee think, that there ought to be an undeviating adherence to the following principles, and their general applications.

"1. Exactness. By which is understood, the learning perfectly whatever is professed to be learned at all."

"2. Punctuality. By which your Committee mean, that the performance of all exercises should be limited to a certain time, and then be rigorously exacted."

"3. Progression. By which your Committee would express a gradation of exercises, from easier and shorter, to more difficult and ample, according to the power of performance."

"During the whole course of education the youthful faculties are to be kept upon the stretch. As they develope themselves, and gain strength, they are to be employed in work demanding severer tension and more dauntless vigour. As in mathematical science every preceding proposition is an instrument in the demonstration of those which follow; so in all branches of education, every thing which, before being learned, is an *end*, becomes, when learned, a *means*, and is to be applied, in its turn, to the remoter and abstruser investigations. On no account, therefore, ought students in the more advanced classes, to spend their time in those elementary studies which occupy beginners. It is the impoverishment of intellect — it is a waste of life — it never can be necessary, unless the necessity be created by some mismanagement in the system."

The resolutions adopted to carry into effect the recommendations of the Committee prescribed a course of study for each of the classes: —

"1st. That the studies of the different classes be arranged as follows.

"First Year or Freshman Class: — Professor of Languages: Cicero's letters to Atticus, Sallust entire, Horace's satires, Dalzel's Collectanea majora, Xenophon's Memorabilia, Kent's Lucian — double translation — Latin verse — Roman Antiquities. Rhetoric and Belles-lettres: English Grammar and Reading, English Composition, Declamations in English. Mathematics: Euclid's Elements. Geography.

"SECOND YEAR — OR SOPHOMORE CLASS: — Professor 1810
of Languages: Virgil's Georgics, Livy, — Horace's Odes and Epistles, Demosthenes, Homer, Herodotus, Greek and Roman Antiquities, Double Translation — Latin Composition in prose and verse. Rhetoric and Belles-lettres: Elements of Rhetoric, English Composition, Declamations in English and Latin. Mathematics: Plain Trigonometry and its applications, Algebra. Geography and History: Geography, History & Chronology.

"THIRD OR JUNIOR YEAR: — Professor of Languages: Cicero de Oratore — Terence — Quintilian — Horace, the second time — Longinus — Sophocles — Greek and Roman Antiquities — Double Translation — Latin and Greek Composition in prose and verse. Rhetoric and Belles-lettres: English Composition — Criticism — Illustrations from the best Poets and prose writers — Declamations — the pieces to be of the student's own composition. Mathematics: Spherical Trigonometry — Conic Sections — Natural Philosophy. Geography and History: Geography — History and Chronology. Science of Mind &c.: Elements of Ethics.

"FOURTH YEAR, OR SENIOR CLASS: — Mathematics: Natural Philosophy — Astronomy — Fluxions. Rhetoric and Belles-lettres: English Composition — Criticism of approved writers — universal Grammar — Declamations. Science of Mind and Morals: Analysis of intellectual Powers — Principles of reasoning — Law of Nature and Nations — No student to deliver at Commencement any Speech or Piece which shall not be of his own composing."

And it was further ordained that: the "Examinations be conducted in a solemn manner;" no student deficient in the studies of a year "shall be permitted, on any account whatever, to proceed to a higher class;" "students, at the close of every examination, shall take rank in the class according to their respective merit;" on special examination for honors held once a year, students who most distinguish themselves shall receive premiums, to consist of gold and silver medals and books of definite value to be "conferred in the most public and impressive manner;" a student found "incompetent to his studies" shall be

1810 dismissed, and "that want of sufficient progress to entitle him to proceed to a higher class, after remaining for two years in a preceding one, shall always be considered as proof of incompetency or negligence requiring dismission;" "no student shall, during the months of study, attend any public amusement on pain of dismission;" "no expelled student shall be readmitted, nor shall any expelled student from any other College be admitted."

The Professorship of Chemistry was assigned to the Faculty of Medicine and detached from the Faculty of Arts, which was thereafter to consist of five Professors, one each in the following departments: Greek and Latin Languages, including the Greek and Roman Antiquities; Rhetoric and Belles-lettres; Mathematics and Natural Philosophy; Geography, Chronology, and History; the Science of Mind and Morals, with the Principles of Public Law. All fees to the Professors were abolished, and each student was to pay into the treasury of the College $100. The President was to receive in addition to a dwelling house provided by the College an annual salary of $3500; and each Professor, in addition to a house, $2500. A subscription was to be opened "for the procuring of funds towards the extending of the public buildings, of the library, and philosophical apparatus of the College." An address to the public was soon after prepared, bearing date July 30, 1810, in which the Trustees state that in consequence of "their funds having been greatly impaired by the Revolutionary War, and by the loss of large landed property in the State of Vermont," they are under the necessity of resorting to the liberality of public-spirited individuals, and say "In making their appeal to the citizens of New York, they feel a confidence of success proportioned to the value of the object, and the justly famed munificence of the City. As the College is immediately intended for the benefit of the Youth of our own City and its vicinity; and as no application has been

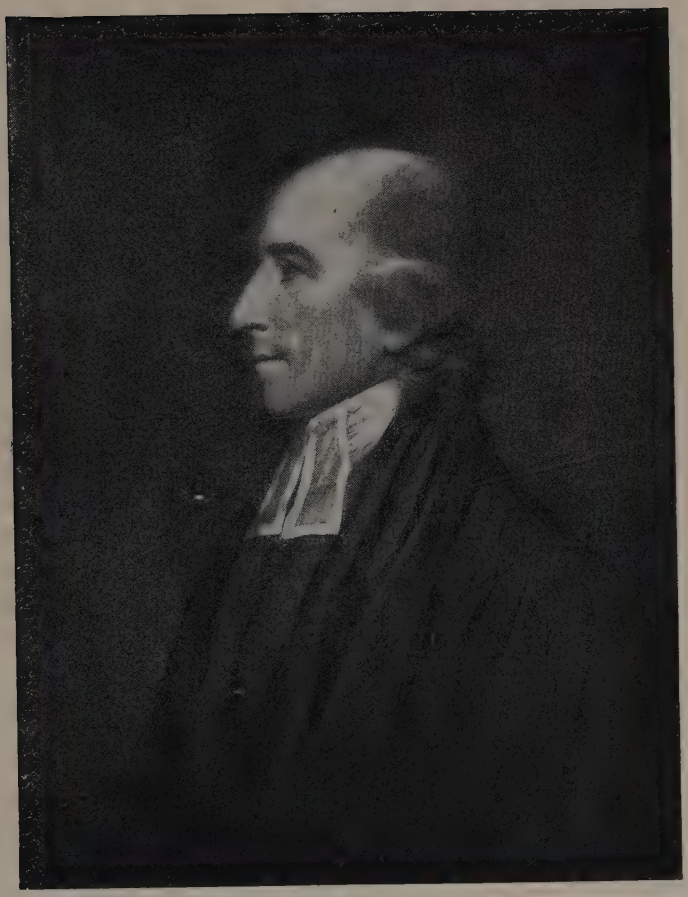
made to private bounty on its behalf, for more than fifty 1810
years, the Trustees indulge a hope that they shall be amply supported by their fellow-citizens, in their efforts to render Columbia College a seat of learning every way worthy of the commercial Metropolis of the United States."

The clear enunciation and eloquent exposition of the fundamental principles of education contained in the report of the Committee, and their practical embodiment in a course of study and system of discipline, were very important in the history of the College. The Trustees expressed the opinion that the effect of their action was "to lay a broader basis for sound and thorough education than (as they believed) has hitherto been known in these States." The policy adopted controlled the progress of events for many years.

In the years succeeding the Revolution there was for a time a Society for Progress in Letters. This became extinct in 1795. In 1802 the Philolexian Society was founded, and in 1806 the Peithologian Society. They were given the use of rooms in the College and soon became centres of student life, both literary and social. In the absence of athletics and other undergraduate organizations, they occupied a prominent place and constituted the chief interest among the students. It is interesting to note that the color of the Philolexian Society was white and the color of the Peithologian blue, and that the two together make the "Colors of Columbia, the dashing White and Blue."

With the close of the academic year 1810, twenty-five classes had been graduated since the revival of the College in 1784. The average number of graduates each year during this period was about seventeen. The classes, though small in number, seem to have made up in quality what they lacked in quantity. There was scarcely a year that the community was not enriched, from this source, by men who became influential in promoting the welfare

1810 of society. Among them were Judges, Legislators, Divines, College Presidents and Professors, high-minded men in various walks of life, worthy contemporaries and coadjutors, as they were fellow-alumni, of — De Witt Clinton, Senator of New York, United States Senator, Mayor of New York City, Lieutenant-Governor of New York, Canal Commissioner and chief promoter of the Erie Canal, Governor of the State, noted for his scientific attainments, for his liberal patronage of science, and his efforts to promote public education, "the Pericles of our commonwealth; for nearly thirty years he exercised, without stooping to the little arts of popularity, an intellectual dominion in his native State, scarcely inferior to that of the illustrious Athenian, a dominion as benignant as it was effective;" Daniel C. Verplanck, Judge of Dutchess County, New York, Representative in Congress, and his more distinguished son, Gulian C. Verplanck, scholar and writer, annotator of Shakespeare, Professor of the Evidences of Christianity in the General Theological Seminary, New York, Representative in Congress, member of the Senate of New York, then a Court of Errors, and as such distinguished for his juristic learning and his profound judicial opinions; Samuel Jones, member of the Legislature of New York, Recorder of New York City, Chancellor of the State of New York, Chief-Justice of the Superior Court and Justice of the Supreme Court of New York; Peter A. Jay, member of the Legislature, Recorder of New York City, President of the New York Historical Society; John Treat Irving, member of the Legislature, first Judge of the Court of Common Pleas, New York; David Murray Hoffman, Judge of the Supreme Court, New York, and noted for his profound knowledge of ecclesiastical law; Peter D. Vroom, Governor and Chancellor of New Jersey, Representative in Congress, United States Minister Plenipotentiary to Prussia; Daniel D. Tompkins, Representative in Congress, Justice of the Superior



BENJAMIN MOORE, S.T.D. (COLUMBIA)

Acting President, 1775–1776
President, 1801–1811

Court of New York, Governor of New York for many 1810
years and in that capacity recommending the abolition of slavery in the State and organizing the public-school system, Vice-President of the United States for two successive terms; Clement C. Moore, whose *Ode to St. Nicholas* is known wherever the English language is spoken, a ripe scholar, Professor in the General Theological Seminary of the Episcopal Church, of Biblical Learning, then of Hebrew and Greek, and afterward of Oriental and Greek, Literature; Nathaniel F. Moore, an elegant classical scholar, Professor of Greek and Latin in Columbia College and President; Henry Vethake, President of Washington College, Virginia, and afterward Provost of, and Professor in, the University of Pennsylvania; James Renwick, early and widely known in his day for his scientific acquirement and his Manual of Mechanics, Professor of Natural Philosophy and Chemistry in Columbia College; John McVickar, an elegant writer, of wide and varied erudition, the first, perhaps, to lecture in any College in this country upon Political Economy, Professor of Moral and Intellectual Philosophy, of Rhetoric and Belles-lettres, and Political Economy in Columbia College; Dr. John Watts, President of the College of Physicians and Surgeons of New York; Dr. John W. Francis, the noted physician and lecturer upon medical topics, President of the New York Academy of Medicine; the Rev. Dr. John M. Mason, a great pulpit orator, the most distinguished, perhaps, of his time, Provost of Columbia College, President of Dickinson College; the Rev. Dr. Philip Milledoler, one of the founders of the American Bible Society, Professor of Moral Philosophy in Rutgers College and sometime President; the Rev. Dr. Jacob Jones Janeway, a theological writer, Vice-President of Rutgers College, New Jersey, and Professor of Belles-lettres, Evidences of Christianity and Political Economy, one of the early promoters of the Theological Seminary at Princeton, New

1810 Jersey, of which he was long a Director; the Right Rev. Dr. Jackson Kemper, the saintly Bishop, who devoted a large part of his long and active life to the cultivation and organization of Christian influence in the great West and Northwest, the first missionary Bishop of the Episcopal Church, primarily of Indiana and Missouri, and then of the Northwestern Territory, and ending his noble career as Diocesan of Wisconsin; the Rev. Dr. John Henry Hill, missionary in Greece, founder of the "American School," now the "Hill School," in Athens for the education of Greek children, whose labors for the education and elevation of woman in Greece received the marked approval of the Greek Government by whose order he was buried "with the honors of a taxiarch." "I can not but feel self-gratulation and pride, I hope a virtuous one, when I reflect on the number of eminent persons that have proceeded from the very cradle of Columbia College. Draw at a venture from the old and illustrious seminaries of England and Ireland the same number of names as we had on our books, and I will venture to affirm that they would not be superior to such men as Governor Clinton, Chancellor Jones, the Rev. Dr. John M. Mason, and some others."[1]

[1] Professor Cochran to Dr. Hosack: see Hosack's *Memorial of Clinton.*

CHAPTER IX

1811–1829

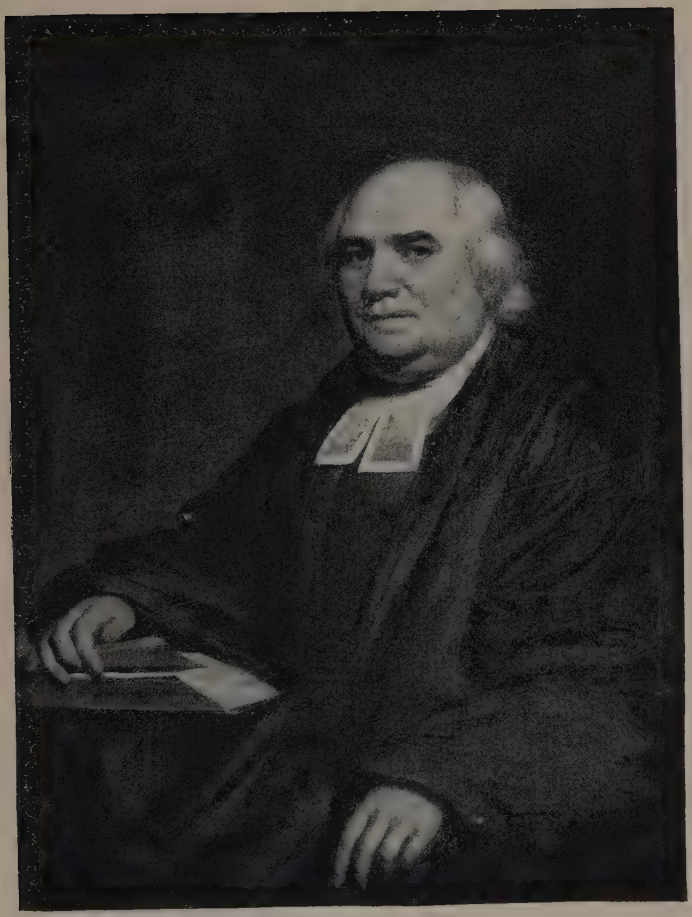
PRESIDENT WILLIAM HARRIS AND PROVOST JOHN M. MASON

Bishop Moore was prevented by the pressure of parochial and diocesan duties from giving much attention to the affairs of the College. His duties as President were accordingly performed for the most part by the Professors in rotation. The result was so unsatisfactory that even the friends of the College "almost despaired of its resuscitation." The situation was rendered more unhappy by the survival or recrudescence, in the Board of Trustees, as well as in a portion of the community at large, of the *odium theologicum* that had antagonized and somewhat delayed the issuance of a charter to King's College.

Early in March, 1811, Bishop Moore resigned the presidency, and a committee was appointed to consider "what measures are proper to be pursued with respect to the appointment of a President." The enlarged and improved scheme of study and discipline recently adopted, and the comprehensive and strong report with which it was introduced, had attracted attention and comment, and very great interest was felt in the choice of an officer to administer it. An influential party desired the election of the Rev. Dr. John M. Mason, of the class of '89, one of the committee that had introduced the new curriculum. He appeared, however, to be ineligible to the presidency by reason of the condition of the grant of land made by Trinity Church that the President should be a communicant of the Episcopal Church. This restriction had been eliminated from the Charter by the Legislature, but the pre-

1811 vailing opinion, nevertheless, was that it still remained in force as to the land, which would be forfeited by its non-observance. The determination to secure the services of Dr. Mason was, however, so strong that, on recommendation of the Committee, an executive officer, additional and really superior to the President, was provided for, styled the Provost. The President was to superintend the buildings and grounds, to report to the Trustees, as occasion might require, the state of the College and measures that he deemed necessary for its prosperity, to have power to visit the classes and any of the College apartments, to give such directions and perform such acts generally as were calculated, in his opinion, to promote the interests of the institution, to preside at Commencements and meetings of the Board of the College, and to sign all diplomas. The Provost was to have all the duties and powers committed to the President, except that he was to preside at Commencements and meetings of the College Board only in the absence of the latter, and, in addition, was to grant leave of absence from College in his discretion, to see that the prescribed course of instruction and discipline was faithfully followed, and to rectify all deviations from it, and to conduct the classical studies of the senior class. Under this arrangement, the Rev. Dr. William Harris, a Harvard alumnus of the class of '86, was in June, 1811, elected President, and the Rev. Dr. Mason, Provost. Under a special act of the Legislature, Dr. Mason was subsequently (1812) made a Trustee. Considerable feeling seems to have been engendered by the outcome of the contest. There was an attempt made to bring the alleged violation of the condition as to the presidency to the attention of the Legislature, but nothing came of it.

The first Commencement at which Dr. Harris presided was known as the "Riotous Commencement" and was held August 7, 1811, in Trinity Church. The "riot" was occasioned by the denial to a member of the graduat-



WILLIAM HARRIS, S.T.D. (COLUMBIA AND HARVARD)
President, 1811–1829

ing class of his diploma because of his refusal to amend 1811
the language of his Commencement oration as directed by the Faculty. The student appealed to the audience, and the response was ready and violent. Several of the participants, one of them a recent graduate and subsequently a man of distinction in literature and politics, were arrested, indicted, tried before Mayor De Witt Clinton, and fined in substantial amounts. The trial and its results engendered bitter feelings that made themselves felt in New York politics for many years.

The discipline of the College appears to have soon become more exacting, and strenuous efforts were made to give effect to the "new system" of education. That system required, for its full execution, an increase of annual expenditure, which was not feasible without aid from the Legislature, for which the Trustees applied "with the confidence naturally inspired by the ample donations made by your honorable body to various Seminaries of learning." Their appeal proved unavailing for a considerable period, during which they struggled with their accustomed energy, fidelity, and wisdom, to produce the happiest effects possible with the "present scanty funds of the Institution."

Dr. Kemp, the Professor of Mathematics and Natural Philosophy, died in November, 1812. His death was a serious loss to the College, and was greatly deplored by the Trustees, who expressed their "deep concern" in resolutions attesting his "great ability and fidelity." During the illness which preceded his death, Mr. James Renwick, of the class of '07, conducted the studies of the senior class in Natural Philosophy, of which he afterward became Professor, and Mr. Henry Vethake, of the class of '08, instructed the classes in Mathematics. Their services were continued for some time, and in May, 1813, Mr. Robert Adrain was elected to the vacant chair.

Again, in March, 1814, the Trustees addressed themselves to the Legislature for financial aid. They presented a

1814 very urgent memorial and appeal, in which, after declaring "their firm conviction, justified, as they suppose, by indisputable facts, that the whole instruction to be acquired in Columbia College will not suffer in Comparison with that of any other American Colleges in its present state, which they consider as an earnest of what they may expect it will shortly become," they say: —

"Situated in the most important City of the State, an Object of Curiosity and Remark to Strangers; and indispensable in its position, to a large portion of the Students who must obtain a liberal Education on the spot, or be deprived of it altogether, Columbia College presents a Spectacle mortifying to its friends, humiliating to the City, and calculated to inspire opinions which it is impossible your enlightened body wish to countenance.

"The foundation of a new wing to the Edifice, laid by the order and under an Appropriation of your honorable body, has been for Years, a heap of ruins solely for want of further public Assistance.

"The Library of the College, which fell a sacrifice to the war of independence, has never been replaced but in so slender a degree as to make it a subject of ignominious Comparison with the pre-eminence, in this Respect, of other American Colleges.

"The Philosophical Apparatus, originally good, has been damaged by long use, and unavoidable Accident, and is now incompetent to the advanced State of physical Science.

"There is no proper Apartment for the Reception of a decent Library. There is no Hall fit for the Performance of public Exercises. There is no astronomical Observatory which is of essential moment both to our commercial and military marine: a solid basis for such a Structure was laid at the same time with the foundation of the new wing and left unfinished for the same Cause.

"Your Memorialists are under the necessity of exacting, in two Instances, the Labors of two Professorships from one Person, which renders the toil unreasonable and oppressive. They have found it due to the State of Science and to public Opinion to institute a Professorship of Chemistry as a part of the academical Course, and have appointed a Professor without being able to give him any

Compensation. They cannot employ Tutors to assist the 1814
Professors, an expedient found to be of eminent Utility in other Colleges. They cannot afford gratuitous Education to youth whose humble Circumstances debar them from its advantages, while their talents and Virtues might render them Ornaments and blessings to their country. They cannot erect buildings suitable for the Accommodation of the Students during the hours of Study, from which Circumstance much time is lost and injury sustained.

"All these Difficulties and Embarrassments proceed solely from the Scantiness of their funds.

"YOUR MEMORIALISTS flatter themselves that no literary Institution in the State can offer to the contemplation of your honorable Body a case more fully entitled to legislative Sympathy and Succor.

"YOUR MEMORIALISTS are emboldened to hope that their Appeal to the magnanimity of your honorable Body will not be fruitless, especially when in addition to the preceding View, they respectfully add

"1. That the patronage which Columbia College has received for a period of Thirty Years has been limited and has not in the Aggregate amounted (if your Memorialists are correctly informed) to one fifth part of the benefactions made with the most praiseworthy Munificence to a Kindred Institution.

"2. That Columbia College was once in possession of landed property, which, if she still retained it, would be amply sufficient for her wants, and would save your Memorialists from the afflicting necessity of importuning your honorable body. That property was transferred by the State of New York, on great political Considerations, to other hands. It was entirely lost to the College, and no Relief, under the privations which the loss occasioned, has hitherto been extended to her.

"YOUR MEMORIALISTS therefore pray that your honorable body will take the Premises into favorable Consideration, & grant such assistance therein as to your wisdom shall seem meet."

Moved by this appeal, the Legislature granted to the Trustees the "Botanic Garden," which had been established and for some years conducted by Dr. David Hosack in the

1814 interest of medical science, and "lately conveyed to the people of this State" by him. This tract of land, situated on what is now 47th and 51st streets and running from Fifth Avenue to within about one hundred feet of Sixth Avenue and constituting at present a very valuable possession, was then about three miles out of town. It was referred to, in official College documents, as "within a few miles of the City," and, though estimated by the Legislature to be worth $75,000, "would not, upon a sale, bring more than six or seven thousand dollars."

It was not considered an attractive and helpful gift to the Trustees, particularly as its grant was coupled with the express condition that the "College establishment" should be removed thither within twelve years. This injurious restriction continued for five years and was then, after much effort by the friends of the College, repealed.

Dr. Mason had been one of the severest critics of the methods of administration that prevailed during the presidency of Bishop Moore, and was believed to possess great executive capacity. He was one of the most active of the Board of Trustees and was doubtless largely influential in securing for the College from the Legislature the grant of Dr. Hosack's "Elgin Botanical Garden." As a College administrator, he appears not to have equalled expectation, and in July, 1816, resigned the Provostship and severed his connection with the College. His powers and duties as Provost were devolved upon the President, except that the instruction of the senior class in the classics was remitted to the Professor of the Greek and Latin Languages. The President was, however, in addition to his other duties, charged with the instruction of the students in English composition.

The removal of the College, which the Legislature designed to enforce by the Act granting the Botanic Garden, had been thought of by the Trustees prior to the enactment, and was soon after again considered. In

November, 1802, a committee was appointed "to enquire 1816
and report on the Subject of finishing the Wing to the College Building; taking into Consideration the Propriety of removing the College to some more convenient Situation." Nothing appears to have come from this inquiry. In July, 1813, Mr., afterward Professor, Renwick addressed to the Trustees a letter relative to certain improvements of the College grounds. This letter was referred to a committee, and the subject was considered from time to time. At a Meeting of the Trustees on March 14, 1816, the Committee was requested to inquire "whether an eligible site for a College could be found at a distance from the City not greater than Art Street" (now Astor Place). On their report, May 6 following, a committee was directed to "negotiate for the purchase, of the representatives of Anthony L. Bleecker deceased, of a piece of ground near Colonel Varick's place, containing thirty-two lots, and that they report to the Board, with all convenient speed, the lowest price at which the same can be obtained." Two weeks later the committee reported "that the ground might be purchased for seven hundred dollars a lot," which the Board deemed greater than was expedient for them to give, and the matter was dropped.

A letter to the Trustees from Daniel D. Tompkins, Governor of New York, an alumnus of the College of the class of '95, dated February 27, 1817, enclosed a copy of a resolution adopted by the Regents of the University shortly before, and asked early consideration for it. The resolution was as follows: —

"Resolved that it be and hereby is recommended to the Trustees of Columbia College to unite in a consolidation of the funds and property of said College with those of Washington College on Staten Island for which a Conditional Charter has been granted; if the consent of the Corporation of Trinity Church can be obtained; and that

1817 it be further recommended to the Trustees of said College, if they approve of the consolidation suggested, to negotiate with the Corporation of Trinity Church the terms upon which said Corporation will agree to relinquish the conditions in their grant to Columbia College, which fix the site of said College in the City of New York, and require that the President shall be a member of the Protestant Episcopal Church, and report the result to the Regents that it may be submitted to the Legislature at their present session."

Governor Tompkins suggested terms that he deemed eligible and beneficial to all parties.

The subject was referred for report to a committee consisting of Hon. Richard Harison, Hon. Rufus King, Judge Brockholst Livingston, Bishop Hobart, and William Johnson, LL.D. The committee, in a full and carefully prepared report presented at a special meeting of the Trustees, held March 27, say they have considered the subject "with all the Attention due to its intrinsic Importance, and the high Character and Station of those by whom it was recommended"; that they cannot find it "consistent with the Duty of faithful Trustees, and necessary for the Advancement of Literature and Science," to promote the union of the two Institutions, and that "the Proposals for uniting Columbia College with the College to be established on Staten Island ought not to be accepted."

The report was unanimously approved. This seemed to settle the question of removal for an indefinite time, and the matter passed from the minds of the Trustees.

As no change was to be made in location, the state of the buildings demanded early attention — as "the reputation of the College, in the view of the public, greatly suffers, from the apparent neglect and decay of its edifices." On a careful investigation of the necessities of the case and of the funds procurable to meet the expense, it was concluded that "the most economical plan which

can be pursued, in order to meet the present exigencies of 1817
the College, will be, to erect, at each extremity of the old building, a block or wing of about fifty feet square; each wing to contain two houses for Professors, facing the College Green, and projecting beyond the front of the old building, so as to be on a line with the fronts of the houses on the north side of Park Place. The old building, by means of some interior alterations, will afford ample accommodation for the purposes of instruction, together with a Library and a Chapel" (September 1, 1817). The expense was estimated to be about $40,000, which could be met by the sale of stocks and bonds to the amount of about $32,000, the use of two-thirds of one year's surplus revenue, about $2000, and by a loan for the remainder. The plan was adopted and a committee appointed to carry it into execution (September 6, 1817). In the course of building, aid was received from the Legislature by an Act, passed February 19, 1819, removing the condition attached to the grant of the Botanic Garden, that the College establishment should be removed thereto or to land adjacent, and making the tract available, therefore, for sale or lease, and contributing the sum of $10,000 "out of any monies not otherwise appropriated." The building committee finished its labors and rendered its final report October 2, 1820. It appears from this that the expenditures of the committee far exceeded the estimate, and amounted to $80,741.47.

The Rev. Dr. Bowden of the class of '72, who had been Professor of Moral Philosophy, Rhetoric, and Belles-lettres and logic since 1801, died in 1817, and the Trustees recorded their high sense of his learning and ability "together with the most unfeigned veneration for the example, displayed by him, of all the moral and Christian virtues." The Rev. John McVickar, of the class of '04, was elected his successor, and entered upon that long and distinguished career in connection with the College which

1818 ended only with his death in 1868. At the same time, to give Dr. Wilson, Professor of the Greek and Latin Languages, the relief rendered necessary by his advancing years, and that he might devote his time to the higher classes, there was established an Adjunct Professorship in that department. The duties of the Adjunct Professor were to take especial charge of the freshman class, and "to see that the members of the Class are employed upon those Languages under his inspection for at least four hours in every day appropriated by the statutes for study, and that those hours be so chosen as not to interfere with the attendance of the Class upon any of the other Professors." The freshman class was thereafter relieved from the requirement to write English compositions for the inspection of the President. Nathaniel F. Moore, of the class of '02, was elected Adjunct Professor. In referring to this arrangement in their report to the Regents of the University in February, 1818, the Trustees remark that "from the acknowledged abilities and zeal of Mr. Moore and the Exertions of Dr. Wilson the Trustees entertain a Hope (which they consider as well grounded) that the Alumni of this College will continue to be distinguished by a Character derived from what has been elegantly termed 'the wholesome and invigorating Discipline of classical Learning.'" Dr. Wilson resigned his Professorship in February, 1820, and for his "faithful and eminently useful services during the period of twenty-eight years" he was granted an annuity of $1500 for his life. Adjunct Professor Moore was chosen his successor, and for fifteen years administered the office with great satisfaction to the Trustees and benefit to the students. He had the advantage in his labors of the coöperation of Charles Anthon, of the class of '15, who was made Adjunct Professor. Not long afterward, in May, 1820, the Professorship of Mathematics and Natural Philosophy was divided into a Professorship of Mathematics

and Astronomy and a Professorship of Natural and Ex- 1821
perimental Philosophy and Chemistry. Professor Adrain was assigned to the former, and in December, James Renwick, of the class of '07, was elected to the latter.

The number of students in the College at this time was one hundred and thirty-five. Early in the year 1821, the Trustees adopted a new body of statutes, in which the requirements for admission were raised, and the curriculum enlarged and improved. The Professors were to be "engaged in the instruction of the classes five days in the week, and, at least, three hours in each day;" they were to teach "*subjects* rather than whole books," "keeping in view the principles of the Report presented to the Trustees of the College on the twenty-eighth day of February 1810" of which an extract was annexed; the classes were to be assembled "every morning, except Sunday, at nine o'clock, for the purpose of attending prayers," after which, on Saturdays, six at least of the senior class, and on other days of the week one at least from each of the other classes, were to pronounce declamations; the officers of the College in charge of the course of instruction and discipline were prohibited from engaging "in any professional pursuits from which they derive emolument and which are not connected with the College;" there were to be "two examinations of all the classes every year, the one to commence on the first Tuesday in March, and the other on the first Tuesday in July;" the Commencement was to be held "on the first Tuesday in August" after which there was to be a vacation until the first Monday in October; there was to be an "intermission of the public lectures on the fourth day of July, on the twenty-fifth day of November, and from the twenty-fourth day of December until the fourth day of January." The two examinations were public, notice of the time of their commencement was given in two of the daily papers published in the City, the Regents

1821 of the University, the Trustees of the College, the parents and guardians of the students, and such other persons as the President might think proper, were requested to attend, and the time consumed by each of them was about one month. The Library was in general charge of a committee of the Trustees, the junior Professor was, *ex officio*, Librarian under the direction of the President: the only persons privileged to take books from the Library, which was open for the purpose of delivery from 12 to 2 o'clock every Saturday, were "the Trustees of the College, the President and Professors, the students of the Senior and Junior Classes, and such of the graduates of the College, residing in the city of New York, as shall contribute towards the expenses of the Library the sum of four dollars annually." The annual tuition fee of the students was $80.

At the Commencement in 1821, the honorary degree of Master of Arts was conferred upon Washington Irving. In a letter of acknowledgment to the President of the College, under date "London, August 6, 1821," Mr. Irving says, "I beg you will communicate to the Board of Trustees my deep sense of their unexpected, and, I must say, unmerited kindness; I feel that it is far, far beyond my deserts. Nothing is nearer to my heart than the desire of meriting the good opinion of my countrymen; and, above all, of my townsmen; but their good will has outstripped all my efforts; and I despair of ever doing enough to prove myself worthy of the rewards already lavished upon me."

In November, 1825, Professor Adrain resigned the Professorship of Mathematics and Astronomy. He recommended Dr. Henry James Anderson, of the class of '18, as his successor, commending him for "his great acquirements in Science and his incomparable sagacity and acuteness in his researches." Dr. Anderson was chosen, and for eighteen years actively discharged the duties of his office.

At the close of the year 1825, the College was in charge 1825
of a Faculty composed wholly of its own alumni (the Professor of Law was not a member of the governing Board) — Moore, McVickar, Renwick, Anthon, Anderson — all remarkable for elegant accomplishment in their several departments, destined to have long and influential connection with their *alma mater* and to contribute, in a substantial manner, through the many young men whom they taught and inspired and through their own lucubrations, to the advancement of learning and the well-being of the community.

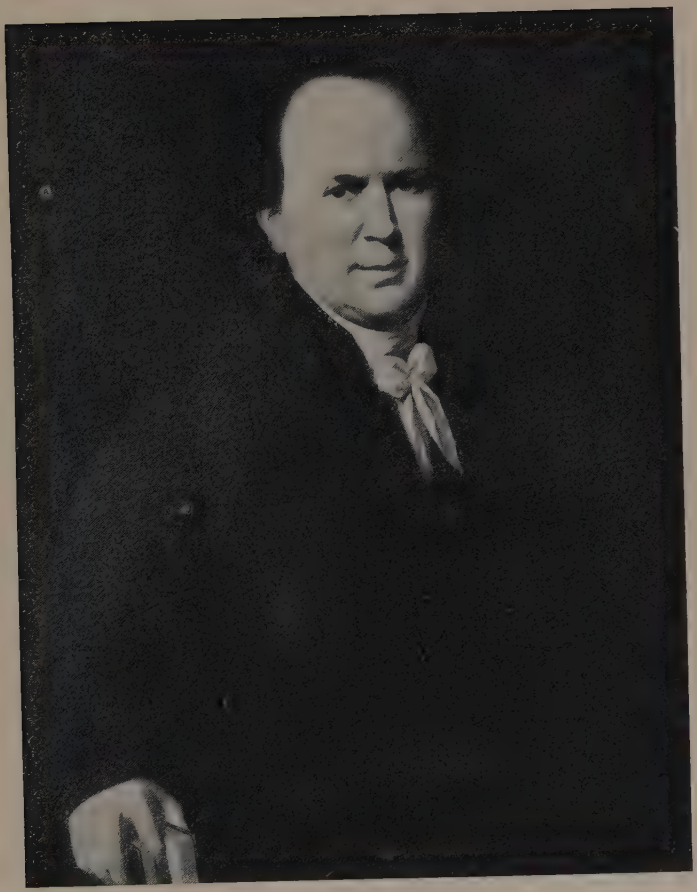
In December, 1827, a Grammar School in connection with the College was resolved upon and the plan of it adopted. The school was not to be opened till forty pupils should be pledged who would pay $12.50 quarterly. The plan was unsuccessful; a new one was devised, which was put into operation in the spring of 1828, with Mr. John D. Ogilby as Headmaster. There were reported eighty-seven pupils in the school, December 1, 1828. Mr. Ogilby had been a student in the College, in the class of 1829 during its sophomore and junior years. Because of the record made during his studentship and of his successful management of the school, he was granted the degree of Bachelor of Arts with his class in 1829. The increasing number of students in the Grammar School induced the Trustees to erect a special building for its use, and one was built, for about $8500, and opened in September, 1829. For a time the school became more prosperous — but the unsatisfactory nature of its connection with the College, the responsibility of the Headmaster and his lack of independent power, led to depreciation in its excellence, and Mr. Ogilby retired in November, 1830. Professor Anthon then took charge and conducted the school in addition to his labors as Professor in the College. Dr. Anthon, with his rare energy and ability as a teacher and an administrator, raised the standard of the

1829 school, of which he was made Rector. For a third of a century, during which he conducted it, it was, perhaps, the most noted school in the city of New York. By an arrangement with the Trustees, made May 1, 1833, the school, while retaining its nominal connection with the College, became really a private enterprise. Dr. Anthon retired from the Rectorship, and the school ceased to have any connection with the College, in 1864.

In July, 1828, Mr. Charles Clinton, son of Governor De Witt Clinton, presented to the Trustees the chair in which his father was seated at the time of his death. The last literary effort of Governor Clinton was the address that he delivered before the alumni of Columbia College, May 3, 1827, in which he expressed his gratitude and attachment to his *alma mater*. On motion of Bishop Hobart, the Trustees accepted with "grateful veneration for the memory of the late Governor Clinton, an alumnus of this College, the chair in which he was seated at the time of his death," and caused "a suitable plate and inscription to be placed upon the same." The chair is now in the office of the President of the University.

In the fall of 1829, President Harris died, after an illness of some time. During the periods of his absence through illness, Professor McVickar discharged the duties of the presidency and continued to do so till the election of a successor, the Hon. William A. Duer, a Judge in Equity. Mr. Duer accepted the office January 5, 1830.

During President Harris's incumbency the younger alumni appear to have associated themselves together for social intercourse and literary improvement. The minutes of the Trustees of the College of October 16, 1816, refer to the granting of the application of a "Society consisting of graduates of Columbia College established for the purpose of reading papers on literary and scientific subjects" for leave to fit up and use a room in the College. The formation of this society is the earliest



JOHN M. MASON, S.T.D. (PENNSYLVANIA)
Provost, 1811–1816

evidence at hand of organized action by the Alumni as such; it was followed on May 4, 1825, by "The Society of the Alumni of Columbia College," which was the forerunner of the present Alumni Association. Another literary association established about this time (1824) had an interesting history.[1] On the 4th of December, 1824, fifteen undergraduates and recent graduates of the College, "desirous of occupying their leisure in exercises for improvement in polite letters," associated themselves together under the name of the Chi Kappa Gamma Society. Out of this grew "The Column," a famous society in its day, which was founded October 10, 1825, and "designed to be subordinate to the Chi Kappa Gamma." It soon outgrew the parent society, the meetings of which accordingly declined in interest and were abandoned. "The Column" had an active existence for over twenty years; it retained its separate life and identity until 1902, when it was merged in the Century Association of New York City, which, by the action of the sole surviving members, the Hon. John Bigelow and Parke Godwin, Esq., became the possessor of its traditions and of its beautiful emblem, a silver column. 1825

[1] See *Columbia Literary Monthly*, Volume II, p. 85, article by John B. Pine.

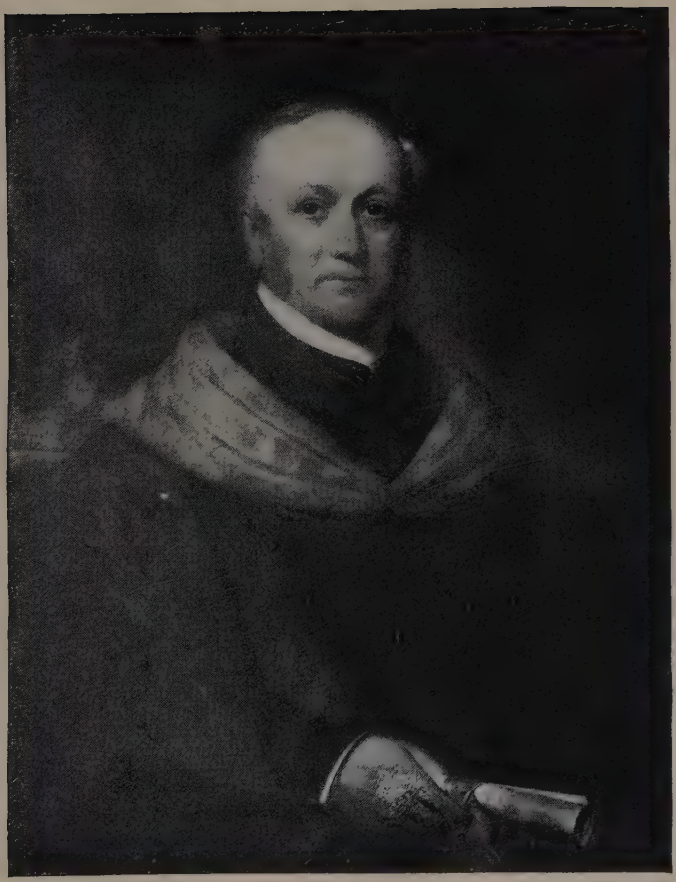
CHAPTER X

1830–1849

PRESIDENTS WILLIAM A. DUER AND NATHANIEL F. MOORE

THE year 1830 was one of great anxiety to the Trustees and of great activity on their part. New educational enterprises were agitated by the community. In particular, there was a proposition to establish another institution of learning in the city, to be styled the University of the City of New York. It was to be a "University established on a liberal and extensive foundation," to "extend the benefit of education in greater abundance and variety" than were offered in any institution previously established, and on these grounds the public was appealed to for assistance in carrying out "this great enterprise." Much interest and enthusiasm appear to have been awakened, and subscriptions to a very considerable amount were early obtained. The Rev. Dr. James M. Matthews resigned on January 16, 1830, his position as Trustee of the College and later became Chancellor of the new University. The Trustees were much concerned as to the effect that the new movement might have upon their own especial charge. They revised and added to the course of instruction. In addition to the regular course leading to the degree of Bachelor of Arts, a new course, designated the "Scientific and Literary Course," was established (January 16, 1830).

It was ordained that the "scientific and literary course shall embrace all the studies now pursued in the College, except those of the Greek and Latin languages: and such other studies in literature and the sciences as may hereafter be annexed thereto;" that either matriculated or



WILLIAM A. DUER, LL.D. (COLUMBIA)
President, 1829–1842

non-matriculated persons might attend the course or any 1830
part of it on paying the prescribed fees ($15 a year for each Professor attended); that satisfactory completion of the course or any part of it by a matriculated student was to be certified by a testimonial, announced at the public Commencement; that public lectureships should be established in the following departments: Greek Literature; Latin Literature; Oriental Literature; English Literature; Chemistry and its applications; Mechanics and Machines; Mineralogy and Geology; Architecture and Civil Engineering; Intellectual Philosophy; Moral Philosophy; Elocution; the Law of Nations and Constitutional Law; Political Economy; Mathematical Science; Experimental Philosophy; Physical and Practical Astronomy; that the Professors might at their option be lecturers, and others were to be appointed by the Trustees. A number of free scholarships was created. It had previously been enacted that any preparatory school, which should send five students to the College in any one year, should be entitled to have one student educated free of charge for tuition. It was now provided that

"the corporation of the City of New York, the Trustees of the High School of the said City, the Trustees of the New York Public School Society, the Trustees or Directors of the Clinton Hall Association, and of the Mechanic and Scientific Institution, the General Society of Mechanics and Tradesmen of the City of New York, and such other societies as the Trustees may, from time to time, designate, shall each be entitled to have always two students educated in the College, free of charge of tuition. Every religious denomination in the City of New York, by its authorized representatives, shall be entitled to have always one student, who may be designed for the ministry, educated in the College, free of charges of tuition. Any person or persons who may found a scholarship, to the amount of one thousand dollars, shall be entitled to have one student educated in the College free of all charges of tuition. This right may be transferred to others." It was further

1830 provided that "any religious denomination or any person or persons who shall endow a Professorship in the Classics, in Political, Mathematical or Physical Science, or in the Literature of any of the ancient or modern languages, to the amount of fifteen thousand dollars, shall, forever, have the right of nominating a Professor for the same, subject to the approbation of the Board of Trustees."

A committee, consisting of Bishop Hobart, Judge Irving, and Mr. Boyd, was appointed by the Trustees to confer with a like committee "appointed on the part of persons proposing to establish a University in this City" — but nothing seems to have resulted from any conference.

The following additional appointments were made on February 3, 1830: Rev. Dr. Samuel H. Turner, Professor of the Hebrew Language and Literature; Mariano Velasquez de la Cadeña, Professor of the Spanish Language and Literature — both "on the same terms and tenure with the Professor of Law," *i.e.* they were not upon salaries, were not members of the governing body of the College, and could have occupations outside of their College work — the Rev. Manton Eastburn, class of '17, afterward the Bishop of Massachusetts, Lecturer on Poetry, and Dr. William H. Ellet, Lecturer on Chemistry.

A Professorship of the Italian Language and Literature had already been established (1825), and filled by the appointment of Signore Lorenzo Da Ponte, an Italian gentleman, a poet, a musician, and an elegant scholar.

At this same time (February, 1830) communication was made to the Navy Department of the United States, through Commodore Chauncey, Commander of the Naval Station at New York, to the effect that "there is in Columbia College a regular course of pure mathematical science, partly conducted by lectures aud partly by recitations, from the elements up to the highest departments of analysis, and which is extended by the Professor to the illustration of Physical Astronomy; this course in-

cludes the theory of Navigation. There are also regular 1830
courses of the theory of Practical Astronomy, of Chemistry, and of Natural and Experimental Philosophy. The latter course embraces the theory of Gunnery, of the Steam-engine, and of the Form and Structure of Ships" — and proposing to "admit to the lectures of both these departments all midshipmen who may be in this port for the purpose of instruction, for the annual sum of $600. The College will provide Mathematical instruction for any number of midshipmen not exceeding forty-five, divided into three classes according to their progress, for the additional sum of $800 per annum." Admission to the public lectures given by these departments in addition to the regular exercises may be had by "all the officers of the Navy who may be upon this station, for the annual sum of $600." A Professorship will be formed in favor of "a gentleman, the most competent as an astronomical observer of any in this country" and "an observatory sufficient for teaching the mode of taking observations erected and furnished with instruments; to the benefits of which all officers upon the station shall have access for the annual sum of $1500. These different courses of instruction, which it is believed, would supersede the necessity of a Naval school, are therefore tendered to the government for the annual sum, in all, of $3500." Commodore Chauncey, while preferring "a naval school if established upon a liberal footing," recommended to the Department to accept the proposal made by the College. There appears to have been no result from this proposition.

Determined to neglect no means of commending the College to the support of the public, the Trustees proposed (February 3, 1830) to the Corporation of the City of New York: —

"That if the Corporation of the City of New York should patronize Columbia College as the City College, the Trustees pledge themselves to ordain, that the Mayor

1830 and Recorder shall be *ex officio* members of the Board of Trustees of the College. That for every $20,000 in money, or in real estate, granted or conveyed to the said Trustees for the use of the College, by any individuals, or any society, or body corporate, in the said City, the Corporation of the said City shall have the right to appoint one Trustee of the said College, until the number of Trustees, so appointed, shall equal, with the Mayor and Recorder, the present number of Trustees. Vacancies in the number of these Trustees shall forever be filled by the Corporation of the City. Vacancies in the present number of the Trustees of the College shall be filled by the remaining Trustees of that number and description, and their successors in office, and that application shall be made to the Legislature of the State for an alteration in the Charter of the College, agreeably to the above provisions:" "That if the Corporation of the City should resolve to appropriate the building called the old Almshouse to literary purposes, and should grant the same, or an equivalent thereto, to the Trustees of Columbia College, the said Corporation shall be immediately entitled to appoint Trustees of the College agreeably to the above provisions."

Though the acceptance of this proposition might, perhaps, have aided the College temporarily, it would doubtless have embarrassed its future prosperity and development by making its management more or less dependent upon political fluctuations. The Trustees were, therefore, happily unsuccessful in their advances to the Corporation of the city.

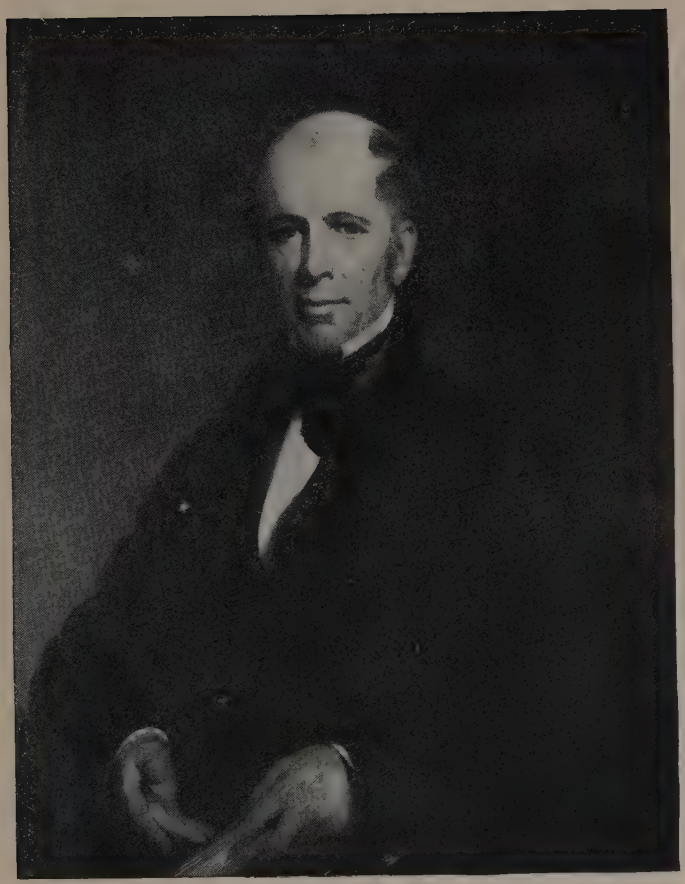
The University of the City of New York was opened in the fall of 1832. In his report to the Trustees in January, 1833, President Duer refers to the falling off in the number of students as follows: "This decrease both in the number of students remaining, of the former year, and in the number entering at the opening of the session, is principally to be attributed to the recent establishment of another institution in the city upon a plan of organization similar to this College. Several of our former students,

indeed, applied for their dismissals for the avowed pur- 1833
pose of entering the University of the City of New York, at its opening in October last; and the far greater part of the candidates for admission from other schools than the Grammar School of the College, joined the new institution, the Grammar School having furnished twenty-five of the thirty-two of which the entering class of the present year consists."

For some years the number of students did not increase. Efforts were constantly made by the authorities of the College to increase its efficiency and attractiveness, by extending the courses, and by diversifying them. The expenses therefore increased and the debt grew steadily larger. No assistance from the Legislature or other sources was obtained, though not infrequent applications were made. Ways and means were earnestly and frequently debated, and some small reductions in the increasing debt were made by raising the price of tuition from $80 to $90 a year, by dispensing with the services of some of the less important officers, and by reducing, for a short time, the salaries of others. The main reliance of the Trustees seemed to be, however, upon the ultimate success of their constant endeavors to furnish the best possible means of education, and so enlarging the number of students, and upon the increasing value of their landed property judiciously managed. In 1836 the statutes of the College were revised "and many important alterations made especially in regard to the courses of study. The full course was materially enlarged in all the departments, and the Literary and Scientific Course defined and extended and placed upon a footing of greater relative importance in respect to the full course, with the view of rendering it a complete system for the education of young men intended for civil or military engineers, architects, superintendents of manufactories, or for mercantile or nautical pursuits."

1837 To increase the efficiency of the scientific courses, $10,000 was appropriated for additions to the Library and philosophical apparatus ; a collection of minerals having been previously purchased for $2300 and a geological collection of valuable specimens received from the State.

On the 13th of April, 1837, was celebrated the semi-centennial anniversary of the reconstruction of the College under the Act of the Legislature passed April 13, 1787. A joint committee appointed by the Trustees, alumni, and students made the arrangements. On the day set a procession was formed on the College Green at ten in the morning, consisting of Trustees, Faculty, alumni, and students of the College, Regents of the University, public functionaries of the City, State, and Nation, and other distinguished guests, and proceeded to St. John's Chapel in Hudson Square. There an oration was delivered by the Rev. Dr. Manton Eastburn, of the class of '17, then Rector of the Church of the Ascension in New York, and afterward Bishop of Massachusetts. A poem written for the occasion was recited by William Betts, of the class of '20 ; a Latin ode, written by William C. Russell, of the Class of '32, and set to music, was sung ; and honorary degrees were conferred upon William Cullen Bryant and other persons distinguished in letters, law, and divinity. A Greek ode written by Professor Anthon, of the class of '15, was put into the hands of a musical composer, with a view to its performance with the other at the celebration ; but the composer not only failed to compose any music, but mislaid the manuscript committed to him, and, as no copy had been retained, lost the ode to posterity. "In the evening the College Hall and Library, having been illuminated and appropriately decorated, were thrown open for the reception by the President of the Trustees, Faculty, alumni, and students, with other friends of the institution, who assembled in great numbers in honour of the occasion."



NATHANIEL F. MOORE, LL.D. (COLUMBIA)
President, 1842–1849

Professor Anthon, whose Greek ode was lost, subse- 1842
quently wrote a very humorous description in verse of the evening reception, in which each of the Professors is represented as singing a song in the language of his department and the President as finishing the entertainment with a song of enjoyment and farewell.

In 1838 a large and valuable addition was made to the Library by the purchase of Professor N. F. Moore's collection, especially rich in classical works. Mr. Moore was engaged to put the whole Library in order and arrange it for more convenient use. The President of the College reported (December 3) that the number of students was greater than ever before, there being one hundred and forty-six in the "full course" and ten in the "literary and scientific course."

President Duer became ill in the latter part of 1841 and resigned his office May 2, 1842. The Trustees expressed their high appreciation of his active and efficient service and deeply deplored the necessity that led to his resignation. They voted him an allowance of $1200 per annum during his life and regretted that the "crippled state of Finances" prevented them from more fully and satisfactorily expressing, in this respect, their sense of obligation. Professor McVickar, again as after Dr. Harris's resignation, acted as President till the election of a successor, which occurred in the following August by the choice of Nathaniel F. Moore, LL.D., of the class of '02, Professor in the department of Greek and Latin 1817–1835.

At the time of President Duer's resignation there were one hundred and four students in the "full course" and three in the "literary and scientific course"; the income of the College was $23,998.05, and the expenditures $22,865.41; the debt of the College was $58,050.

In June, 1843, Professor Anderson resigned his professorship and was succeeded by the Rev. Dr. Charles W. Hack-

1843 ley, at the time of his election Professor of Astronomy in the University of the City of New York, and author of mathematical treatises. Professor Anderson was a profound mathematician, versed also in other sciences, an elegant classical scholar, a most accomplished linguist, and a professor who commanded the attention and regard of his pupils by his character, the extent and variety of his attainments, and his dignified and courteous manners. "He had frequently visited Europe, and after he resigned his Professorship he extended his travels into the far East. The expedition under Lieutenant Lynch, sent to explore the Jordan and the Dead Sea, found him in that quarter, and pressed him into their service as geologist, and his valuable report on the Geology of that region was printed among the papers of the exploration."[1] He subsequently rendered valuable service to his *alma mater* as Trustee (1851–1875). He was one of the very able committee that revised the whole system of education in the College (1857) and put it substantially upon the basis upon which it rests to-day and laid down the lines along which the College has since developed. He died in India, in 1875, on his return from a private astronomical expedition to the northern part of that country to observe the transit of Venus.

In April, 1843, the Trustees received notice of a bequest, made by Frederick Gebhard of New York City, of $20,000 "for the endowment of a Professorship of the German Language and Literature in the said College and for no other purpose whatever." The bequest was accepted, the "Gebhard" Professorship established, and in June, J. Louis Tellkampf, J.U.D., of Göttingen, was elected to the Chair. Professor Tellkampf was given leave of absence, at his own request, to go to Germany, and the salary that might accrue during his absence was, also at his own request, devoted by him to the purchase of books relating

[1] Professor H. Drisler, May 4, 1894.

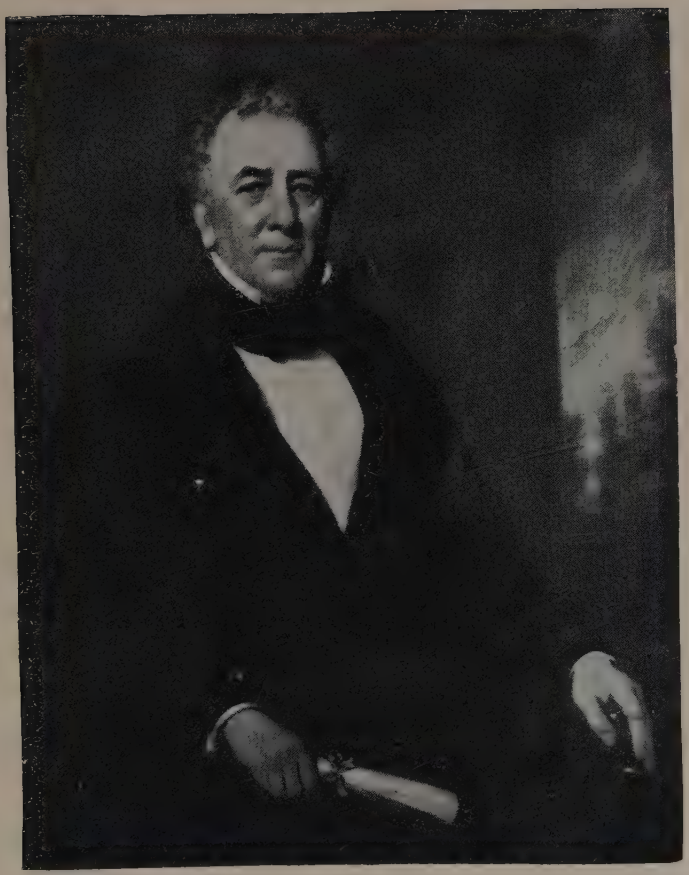
to the work of the department, for the Library. He began 1843
his instruction in April of the following year, the study of German having been, meanwhile, made an obligatory part of the academic curriculum. In January, 1847, the attendance of the two upper classes was made voluntary and so continued for ten years, when the study was made wholly voluntary. In the fall of 1847, Professor Tellkampf resigned and was succeeded by the Rev. Dr. Henry I. Schmidt, who continued for a third of a century in the active discharge of his duties.

In July, 1843, the "literary and scientific course" was abolished "after the end of the present term." There were no students in it at the time. It was apparently in advance of the desires of the community and had never received much encouragement. The highest number in it, in any one year, was twelve; it was often wholly deserted, and for the thirteen years of its existence the total number attending it was but forty-nine. Many of its features were subsequently introduced into the curriculum.

Among the students the literary societies continued their activity, and new college associations were introduced by the establishment of chapters of Greek letter fraternities. In 1836 a chapter of Alpha Delta Phi was formed; in 1842 a chapter of Psi Upsilon; in 1843 a chapter of Delta Phi; in 1847 a chapter of Delta Psi; and later, chapters of others. The fraternities afforded students places of meeting outside the College, gave variety, and added much to the social side of undergraduate life.

The finances of the College, always hitherto an anxious matter, were at this time subject of especial concern. On the report of a committee in July, 1843, the salaries of the President and four principal Professors were reduced, so that, besides a house and $10 a year for each student who paid his fee, the President was to receive a salary of $1400, and each of the four principal Professors, $1200; no Adjunct Professor of Languages was to be appointed

1843 to the place of Adjunct Professor Vermilye, who had resigned; the President was to instruct the Senior Class in classics, the Jay Professor, Dr. Anthon, taking charge of the Freshmen, who had hitherto been taught by the Adjunct Professor. The salary of the Treasurer was reduced to $400; the annual expense for printing was limited to $50, and for the Library was not to exceed $100; the system of prize medals was abolished, as well as the literary and scientific course. The President was authorized to employ, if necessary, an additional instructor in the classics for the first term of the next academic year at an expense not exceeding $200 — and so, by appointment of the President, Henry Drisler, of the class of '39, began a connection with the College destined to be prolonged and distinguished. President Moore's instruction of the senior class in Greek was but of short duration, as in February, 1844, he begged to be excused from that service, and was excused, for the reason given by him "that he, under conviction of expediency, a number of years ago adopted the modern Grecian pronunciation of the Greek language, and therefore finds himself unable to be intelligible, profitable or interesting to his class."



CHARLES KING, LL.D. (HARVARD AND ELSEWHERE)

President, 1849–1864

CHAPTER XI

1849–1864

PRESIDENT CHARLES KING

In the fall of 1849 Dr. Moore retired from the presidency and was succeeded by Charles King, a gentleman of note in the city, a son of the Hon. Rufus King, who had been a valuable Trustee of the College (1806–1824). His accession was "widely hailed on the peculiar score of being a public and a business man, opening thereby a new sphere of popular influence, and creating a new bond of sympathy between the College and the needs and wants of our great commercial Metropolis." [1] Great and beneficial changes occurred during President King's incumbency of his office.

In his report to the Trustees on December 1, 1845, President Moore said: "The general state of the College may be regarded as encouraging. The Institution is beginning to see its path clear of the financial difficulties that have so long obstructed it." Yet the College debt became steadily larger. From a report of the Standing Committee of the Trustees, made February 4, 1850, it appears that this debt will be found to have grown within seventeen years last past from $30,000 to the sum of $68,000, being an average annual expenditure, during that period, of more than $2200 beyond the College income. The hopes of the Trustees for relief seem to have been based upon the prospective increase in the value of the "Botanical Garden" property, heretofore referred to, which "consists of about two hundred and sixty Lots of

[1] Professor McVickar's address at the inauguration of President King, November 28, 1849.

1850 ground and is bounded on the North by 51st Street, on the South by 47th Street, on the East by Fifth Avenue and on the West by a line parallel with and about one hundred feet easterly of the Sixth Avenue." A special committee appointed to consider and report upon the state of the College, the expediency of selling a portion, at least, of the "Botanic Garden," the question of permanency in the location of the College, and other matters connected with the finances of the College, reported April 1, 1850, against any immediate sale, and said, "the present period, from various causes, is marked by great buoyancy in the value of real estate as well as in every department of trade, and the future appears to promise a decided and rapid increase. It is but very recently, and within the last few months, that this impulse has been sensibly apparent, and the causes that produced it, combined with the rapid and steady growth of our population, can hardly fail to secure the property in question from becoming, at any future time, less available than at present, and give the most encouraging assurances that it will gradually and steadily improve." The Committee further reported, "in regard to the permanency of location," "it does not appear to the Committee that any circumstances at present exist, or are likely soon to arise, making a change expedient." The Committee was wiser in its estimate of the increasing value of the property than in its opinion upon "the permanency of location." The brightening financial prospects encouraged the introduction of propositions for the enlargement of the curriculum, the extension of its benefits more widely, and the popularization of the College. The expediency of allowing the alumni of the College, in case of a vacancy in the Board of Trustees, to nominate three candidates to fill the vacancy, one of whom must be chosen, was considered and abandoned (June, 1850), as it would involve an alteration of the Charter.

President King suggested the establishment of a Chair

of American History (September, 1850), which was considered, but not then carried into effect. In February, 1851, a committee, in reporting upon the advance in the value upon the College property, and the prospective easy management of its debt, directs the attention of the Trustees "to the possibility, at least, of the removal of the College to that place" (*i.e.* the "Botanic Garden"). In October, 1852, on motion of President King, a committee was appointed to consider and report upon "the expediency of abolishing the fees for tuition in this College, and of making it free to all who can undergo the preliminary examination," and also upon "the expediency of engrafting upon the foundation of this College a scheme of University Professorships and lectures in the higher departments of Letters and Science." Other propositions were made from time to time, and in October, 1853, a Committee appointed to consider the subject of the Professorship of Natural and Experimental Philosophy and Chemistry, for the relief of the Professor, recommended that "no action be had in reference to this Professorship solely," on the ground that any change made then could be but partial, as the removal of the College would probably be "determined on at an early day," and "that when that period shall have arrived, among the subjects to be considered necessarily connected with the place, plan, and extent of the College buildings, is the scheme of collegiate instruction proper thereafter to be adopted, and that then, the course of instruction now pursued must be radically altered." The Committee continued: "Therefore, before finally resolving upon, or even considering, the question of removal, the Board ought to have the materials for an enlightened judgment upon the more important points indicated above. The consideration of these points, from the intrinsic importance, extent and difficulty of the subject, will necessarily require the most careful and deliberate inquiry, which can only be made by a Com- 1852

1853 mittee composed of such members of the Board as are best qualified for the task." The Committee recommended the passage of the following resolution, which, as it produced great results, is here given in full : —

"Resolved, that it be referred to a Committee of Three to be elected by ballot to inquire, whether it is expedient to take any and what measures for the removal of the seat of the College ; and in the event of such removal, whether any and what changes ought to be made in the undergraduate course ; and whether it would be expedient to establish a system of University Education in addition to such undergraduate course, either in continuation thereof or otherwise. That such Committee report fully as to the principles and details of any plan that they may recommend, and whether in their opinion it can be successfully carried into execution ; and in connection therewith, that they consider whether, for the more effectual carrying out such plan and extending the benefit of this institution, it ought to afford rooms and commons, or rooms alone, for resident students, and ought to have its seat isolated."

The resolution was adopted, and the Committee chosen, which was briefly called the Committee on the College Course, consisted of William Betts, LL.D., Dr. Henry James Anderson, and the Hon. Hamilton Fish.

The Committee reported progress at the next meeting of the Board in November. In this preliminary report the Committee recommended the immediate removal of the College. Efforts were made to carry out the recommendation, but without success. The report stated that in the opinion of the Committee, moral and intellectual discipline was the object of collegiate education, and that "the mere acquisition of learning, however valuable and desirable in itself, is subordinate to this great work," and that this view of the subject would govern the Committee in its inquiries. "We cannot, however, conceal from ourselves," continue the Committee, "that, however manifestly

just this sentiment may seem to us, it does not meet with 1853
universal sympathy or acquiescence. On the contrary, the demand for what is termed Progressive Knowledge so loudly uttered, and for fuller instruction in what are called useful and practical sciences, is at variance with this fundamental idea. The public generally, unaccustomed to look upon the mind except in connection with the body, and used to regard it as a machine for promoting the pleasures, the conveniences, or the comforts of the latter, will not be satisfied with a system of education in which they are unable to perceive the direct connection between the knowledge imparted and the bodily advantages to be gained. For this reason, to preserve in some degree high and pure education and strict mental discipline, and to draw as many as possible within its influence, we must partially yield to those sentiments which we should be unable wholly to resist. Your committee therefore think that while they would retain the system having in view the most perfect intellectual training, they might devise parallel courses, having this design at their foundation, but still adapted to meet the popular demand." With regard to the establishment of a University system in addition to the undergraduate course, the Committee "were not prepared to say more than that they regarded it favorably in those respects in which it might be practicable; but that the design was not free from serious difficulties, that the subject had occupied the minds of learned men in connection with the English Universities, but hitherto without effect; that the Medical and Theological Schools had done much, perhaps all, that could at present be done in that direction; but in regard to higher jurisprudence, and the sciences and their applications, much might possibly be done by the College." There the matter was left for the time for the consideration of the Trustees and for suggestions from the Faculty, both of which were invited.

1853 On November 21, 1853, Professor Renwick's resignation, which had been offered some time previously, was finally accepted with an expression on the part of the Trustees of their just appreciation of his "long-tried, eminent and faithful services in the cause of science and sound instruction." That they might testify, in a suitable manner, their sense of his merits, the Trustees created an order of Emeritus Professorships, without salaries or stated duties, but with certain privileges and honors, and Dr. Renwick was made Emeritus Professor of Natural and Experimental Philosophy and Chemistry. He was invited to sit for his portrait, which was to be provided at the expense of the College and to be hung in the Library or other suitable room in one of the College edifices. Professor Renwick lived for ten years after this to enjoy the honors that his merits had acquired and died aged seventy-one years in January, 1863. In a minute upon his death, the Faculty of the College speak of his active labors in his Professorship "for the long period of thirty-three years, those labours diversified yet increased by occasional demands, during the summer vacations, by Government for the aid of his acknowledged skill and science. Among the most honorable of such duties, as well as perilous, was his appointment by the General Government in 1838 as Commissioner for the survey of the northeastern boundary." The Faculty say further, "Zeal for science was with him ever uppermost, and in various public duties, more especially as connected with the safety of steam, and in the advancement of private associations of science, becoming in some the presiding, and in all an influential manager, Professor Renwick continued both active and useful up to the very day of the fatal attack under which he sank."

The choice of a successor to Professor Renwick proved to be a very serious matter. The controversy to which it gave rise became somewhat warm and bitter, involved

not only the Trustees but the alumni, and was discussed 1854
not without acrimony in the public press. It prevented the celebration, which had been proposed, of the centennial anniversary of the founding of the College in 1754, and culminated in the appointment by the Senate of the State of New York of a select Committee of Three, of its own body, "to inquire whether Columbia College or any of its Trustees have violated any provision of Law or of its Charter; and particularly whether said College or any of its Trustees have in any way required any, and if any what, religious qualifications or test, from any candidate as a condition of appointment to any Professorship in said College." As a result of the inquiries the Committee "arrived at the clear and decided conclusion, that there had been no such violation; and the College was to be left in the full enjoyment of all its chartered rights and immunities, without any attempt to interfere in their lawful exercise." Meanwhile, on April 3, 1854, Mr. Richard S. McCulloh, then Professor of Physics and Chemistry in the College of New Jersey, had been chosen to fill the vacant chair.

On the 24th of July, 1854, the Committee on the College Course, to which had been added the Rev. Dr. John Knox, made a full report upon all the subjects committed to them, recommended a plan, and set forth fully the principles that had guided them in preparing it.

The resources of the College were not sufficient to put into immediate effect any scheme of expansion, and the matter was allowed to rest, to be examined and criticised, amended and improved, till the time became ripe for action. This time arrived in 1857.

In 1855 a special Committee of Trustees on buildings was appointed. This Committee, with the assistance of Mr. Richard Upjohn, the architect engaged, developed plans for edifices on the "Botanic Garden" property. By resolution of the Trustees adopted June 19, 1856, the

1856 Committee was authorized to proceed to the erection of one of the buildings shown on the plan submitted and "covering a length of two hundred and eighty feet, or such part thereof as may be deemed expedient by the Committee." The Committee did not, however, act upon this authority, as the College purchased, in the fall of 1856, of the Deaf and Dumb Asylum, a part of the block of land between 49th and 50th streets, Madison and Fourth avenues, with the buildings thereon. The whole of the block was subsequently acquired. The buildings were put in order for the temporary use of the College, and the scheme for erecting permanent buildings on the College property, Fifth Avenue between 49th and 50th streets, was held in abeyance and ultimately abandoned.

In January, 1857, a part of the site of the College buildings in Park Place was sold, and the necessity for speedy removal became imperative. The Committee on the College Course were instructed "to bring in the full statute to comprehend the whole scheme of College and University instruction contemplated by their former report." The full statute was reported on the 2d of March. It was considered and amended at subsequent meetings, and finally adopted July 6, 1857.

Before this action, however, the College had been removed from its original site in Park Place to the "temporary" location, that it subsequently occupied for forty years, at 49th Street and Madison Avenue. The removal appears to have been a very simple affair. The following account is from the *Evening Post* of May 7, 1857: —

"COLUMBIA COLLEGE. — The exercises in Columbia College were concluded in the old building, to be resumed Tuesday next at the buildings in 49th Street near the Fourth Avenue, until permanently located in the new edifice, proposed to be erected in the Fifth Avenue near 50th Street. At the close of the Chapel exercises, President King briefly addressed the students, exhorting them,

wherever they went, to carry the good and leave the bad behind — to go to the new locality with a clean record, and to preserve it clean. At the close of the President's remarks, a farewell song, written for the occasion by John Ward, of the junior class, was sung to the tune of *Auld Lang Syne.* 1857

"In the course of the day the *corner-stone* of the College building was disinterred. It is a solid block of red sandstone, measuring three feet in length, one foot in depth and one foot in thickness. The letters of the inscription are as fresh and sharp as the day they were cut. It was buried about six feet under ground, on the South-east corner of the old College building."

(The "corner-stone" was embedded in the east wall of the College Chapel at 49th Street and there remained till removed in 1897 and inserted in the mantelpiece of the Trustees' Room in the University Library on Morningside Heights.)

The *New York Herald* of May 4, 1857, refers to the same subject: —

"By the terms of the sale the buyers of the Columbia College property cannot claim possession before the tenth of May, but the Faculty have been actively engaged for some time in getting ready for the removal. The Library books, cabinet minerals and portable property of the College have all been packed and removed to the old Deaf and Dumb Asylum in 50th Street, near Fourth Avenue, which will be used hereafter as the College, until the new edifice destined for the use of the students and Faculty is erected on the College property in Fifth Avenue.

"The old Asylum has been completely refitted, and accommodations have been provided for the President and one of the Professors, with their families, in the building. Should these new quarters prove acceptable to the students, a lease of ten years will be taken, by which time the new College will be ready for occupancy. The old building on Park Place was put up in 1758, and this week the work of demolition will commence." (No "lease" was to be taken, as the College acquired the property in fee.)

1857 The distance of the new location from the well-settled portions of the city and the difficulty of access were so considerable that the Treasurer and the President of the College were (April 22) appointed "a Committee to confer with the Direction or the officers of the Harlem and other Rail Road Companies, and with the Proprietors of any line or lines of Omnibuses, with a view to the establishment of suitable facilities for the conveyance of students and others to and from the new College, and for the arrangement of a price for such conveyance either by commutation or for each trip."

At the time referred to and for years afterward, Madison Avenue was not paved above 42d Street and was not open above 49th Street; "the bones of the unknown dead" were removed from "Potters Field" in the vicinity during the summer and fall of 1858; there was no way of getting across the railroad tracks on Fourth Avenue but by crossing on the level; Bull's Head cattle yards were on Fifth Avenue, east side, just below the present site of the Windsor Hotel; and the region about was as "new" as these remarks would lead one to infer.

The demolition of the buildings in Park Place was begun as soon as the College vacated them and was rapidly effected. The following extract from the *Evening Post* of May 11, 1857, notes the destruction of the old building and the transfer to the new, and gives some account of the "new location" as it then appeared.

"Columbia College. — The old College building in Park Place is now entirely destroyed, and this morning a force of workmen were employed in tearing off the roof and undermining the walls. The transfer to the new College building, between 49th and 50th streets (formerly the Deaf and Dumb Asylum) was made without public display, — a procession, addresses, and other doings were talked of, but abandoned from various considerations. This morning the various classes assembled at the new buildings, but as the work of repairing and refitting is not

COLUMBIA COLLEGE IN 1857

(From a daguerreotype reproduced in the *Photographic and Fine Art Journal*, June, 1857)

yet completed there were no recitations. There will be 1857
some inauguration ceremonies in recommencing the College exercises to-morrow forenoon, when the Protestant Episcopal Bishop of the Diocese is expected to be present, and there may possibly be an address from an ex-Professor, who is a member of the Board of Trustees.

"The new location of the College is a delightful one, and undesirable only on account of the distance uptown — an objection which, by the tendency of population, will be in a few years obviated. The old Asylum buildings have been altered somewhat, repaired, and greatly improved. The two wings have been separated from the main building. The east wing is occupied by the Chapel and the extensive Library of the College; the centre for the recitation rooms and the residence of President King; and the west wing for the residences of some of the College Professors. A beautiful lawn slopes from the College southward down to 49th Street, and is ornamented by some fine old trees. This will be for the present the main entrance to the College, but as soon as the more extensive grounds northward to 50th Street can be graded, laid out, and properly embellished, the principal entrance will be in that direction. The site is on a commanding eminence, affording an extensive and pleasant view. That part of the city is still quite new, and the hand of improvement is visible in all directions. 'Potters Field' is within a stone's throw, and we are sorry to say the ends of rows of coffins, filled with the bones of the unknown dead, are still to be seen protruding from the bank of earth left by the cutting through of the Fourth Avenue. The College will probably remain in its present location only six or eight years, or until the new College buildings to be erected by the Trustees shall be completed."

The "inauguration ceremonies" consisted, according to a contemporary account, of the assemblage of the students in the Chapel for morning prayers: the Chaplain, the Rev. Mr. Duffie, read the third chapter of Proverbs; Mr. Walter presided at the organ and the students chanted the seventy-ninth selection of Psalms; the Rev. Dr. Knox, Chairman of the Trustees, made an address, in which he

1857 impressed upon the students that the increased facilities for study increased also their responsibilities, and that they must not fail to improve these newly created opportunities; President King also made an address; after which the students proceeded to their respective lecture rooms. "Their course of lectures will now continue. Extensive preparations are now being made to beautify and ornament the grounds around the College, and it only remains for 50th Street to be properly regulated to add to the fair prospect of this most noble and worthy institution."

The statute that was adopted in July, 1857, and which was to be put into effect, so far as practicable, at the beginning of the next academic year, continued, in substance, the former collegiate curriculum to the end of the junior year, with adaptations, however, to the future studies, both subgraduate and postgraduate. Beginning with the senior year the statute provided that the course should be divided into three departments, any one of which might be elected by the students entering upon that year, viz.: a "Department of Letters," which was a highly classical and literary course; a "Department of Science," in which predominance was given to courses in science, as Mechanics and Physics, Astronomy, Chemistry, Engineering, Mining, etc.; and a "Department of Jurisprudence," in which Modern History, Political Economy, Natural and International Law, and allied subjects, were given prominence. Prize scholarships were to be established in the subgraduate course under proper regulations and a "University Course of Study" was provided.

When the state of education throughout the country at that time, nearly fifty years ago, is considered, this statute shows great knowledge, foresight, and wisdom. In a public address upon the changes in and enlargement of the course of studies, Mr. Betts, the Chairman of the Committee of Trustees that prepared the statute, says, among other things: —

"Up to this point of College life [the close of junior year] the end in view is mainly to discipline and invigorate the mind, and to enlighten and purify the heart. Now, the object is to apply this intellectual light and vigor to the permanent acquisition of knowledge; to emancipate the student gradually from the trammels of catechetical teaching, and to prepare him for the higher and more arduous efforts of self-instruction. With this view, three departments are constructed, which are termed Schools of Letters, of Science, and of Jurisprudence; the first of which has reference to general improvement; the two latter to specific objects, as indicated by their names. On entering the senior year, each student may select either of these schools. Should he neglect to make a selection, he continues in the Classical or School of Letters." 1857

The tuition fee was reduced to $50. The existing Professorships in the College were subdivided, and several additions were made to the Faculty.

The Professorship of the Greek and Latin Languages was subdivided into two — the Professorship of the Greek Languages and Literature, which Dr. Anthon assumed, and the Professorship of the Latin Language and Literature, to which Mr. Henry Drisler, of the class of '39, who had been appointed Tutor in Greek and Latin in 1843, and Adjunct Professor in 1845, was promoted. Dr. McVickar's extensive duties were apportioned among three chairs — that of the Evidences of Natural and Revealed Religion, to which the Professor himself was assigned; that of Moral and Intellectual Philosophy and Literature, which was filled by the election of Charles Murray Nairne, A.M., a graduate of the Universities of Aberdeen and Edinburgh, a ripe scholar; and a Chair of History and Political Science, to which Francis Lieber, LL.D., the distinguished philosophic historian, was elected. The department of Mathematics and Astronomy was divided, and Professor Hackley assumed the Chair of Astronomy, and Charles Davies, LL.D., a graduate of the United

1857 States Military Academy at West Point, and author of a well-known series of mathematical text-books, was made Professor of Mathematics, with Mr. William Guy Peck, his son-in-law, also a graduate of West Point and a successful mathematical writer, as an assistant. The subjects of Physics and Chemistry were separated; Professor McCulloh was to confine himself to the department of Physics and Mechanics, and Charles A. Joy, Ph.D., who had received his scientific education and his degree of Doctor of Philosophy in Germany, was made Professor of Chemistry. Other chairs were projected but not established.

The effect of these changes was to extend and strengthen the course of instruction and to attract a larger number of students. President King reported to the Trustees that, on opening in the fall of 1857 at the "new site, a greater number of students matriculated than ever before in the history of the College"; and when it is found that the number that called forth this note of exultation was but one hundred and fifty-four, the difference between that day and this is strikingly apparent. Of the electives open for the first time to the members of the senior class, that class (twenty-six in number) divided themselves as follows — fourteen in the "School of Letters," and six each in the Schools of Jurisprudence and Science. The alumni of the College were awakened to greater interest. They sent, through the officers of their Association, a communication to the Trustees, expressing a desire for a conference, to consider propositions for the benefit of the College, and their intention to establish a prize to promote general excellence in scholarship. They established an annual prize of $50 "to the most faithful and deserving student of the graduating class," the Faculty to submit the names of three candidates to the class, who should select one of them to receive the prize. This prize was first awarded at Commencement in 1858, and has been awarded annually ever since.

The Civil War broke out in the spring of 1861. On 1861
the call of the government for troops, a number of the students in the College went to the front. Those who were members of the class of '61 received their degrees at the following Commencement: others subsequently rejoined the College and were graduated with their respective classes: still others abandoned the course for an academic degree and remained in the field. Many of the alumni of the College served in the army, some of them with marked distinction, as Philip Kearny, of the class of '33, the brilliant officer who lost his life at Chantilly in 1862, and all of them with a devotion worthy of the ancient days of the College. Professor Lieber was a not infrequent adviser of the Secretary of War. A minute of the Trustees, December 8, 1862, states: "The Secretary of War of the United States, having requested the presence of Francis Lieber at Washington for a month or more, it was *Resolved*, That leave of absence be given to Professor Lieber until the Fifth of January next." He was often in consultation with Secretary Stanton, though not absent from the College for so considerable a time as that just referred to.

In the latter part of April, 1861, there was a flag-raising on the grounds in front of the old College building on 49th Street. There was a large gathering of officers, students, and their friends. Major Robert Anderson of the United States Army, who had recently returned from participation in the first act of the War at Fort Sumter, South Carolina, raised the flag to the top of the staff and, as it went aloft, exclaimed in a tone that thrilled all who heard him, "God bless that flag!" The Hon. Hamilton Fish, Chairman of the Trustees and subsequently Secretary of State of the United States under President Grant, made an inspiriting address. Professor Lieber wrote for the occasion a song or hymn, on our Country and her Flag, which he called *Freeland*, and which was sung by

1863 all present. Addresses were also made by several of the College officers. During the whole period of the war, excitement ran high, in the College as elsewhere. Many interruptions of the exercises necessarily occurred. In times of victory there were thanksgivings, and in periods of defeat there were days of humiliation. The careers of the students and alumni in the army were watched with great interest. The distinction of any of them for service in the field was a matter of rejoicing, and the death of any in battle or from exposure was severely felt. It is difficult at this time for any one, impossible for one who did not then experience it, to realize the intensity of personal interest and feeling that attached to every event of the war.

The early summer of 1863 was a period of great depression. The Union armies had not met with success, and a pall of gloom settled upon the community. The draft riots, a formidable uprising of the unpatriotic, ignorant, and vicious classes in the city, occurred in July. Angry mobs surged through the streets. The College buildings and other property were threatened with destruction. Two fire companies in the neighborhood, the Liberty Hook and Ladder Company, No. 16, and the relief Hose Company, No. 51, voluntarily took upon themselves the office of protectors and patrolled the streets till all danger was past. They refused any pecuniary compensation for their services on the ground that they were simply doing their duty as citizens and good neighbors, and were, of course, warmly commended and thanked for their high-minded conduct. An incident of the time was the retirement, in the fall of 1863, of the Professor of Physics to participate actively in the conflict. On his retirement, the course of instruction was somewhat modified by changing the mode of instruction in Physics ; by making the higher Mathematics elective, instead of required, for members of the senior class ; by reducing the required

attendance in Mathematics of the junior class from 1864
five hours a week to three, and adding the time thus gained to the attendance in Latin and Greek ; by reducing the time given to pure Metaphysics and proportionately increasing that given to the History of Modern Literature and to Moral and Intellectual Philosophy. On December 21, 1863, Ogden N. Rood, a graduate of the College of New Jersey, a well-known physicist who became renowned, was elected to the vacant chair of Physics.

The war diminished, for a time, the available resources of the College. The leasing of property, which had been improved at great expense, was made difficult and, for a time, impracticable, and the burden of taxation was increased. Expansion on the lines laid down and to the extent anticipated was necessarily deferred. An important enlargement was made, however, in the midst of the troubled and anxious times that prevailed, in the establishment of a School of Mines and Metallurgy.

On the 7th of March, 1864, President King resigned and his resignation was accepted to take effect at the close of the Commencement exercises, June 29. The Trustees, in accepting his resignation, state that "The Presidential term of Dr. King has been distinguished by the removal of Columbia College to its present superior site, by much development and expansion of its educational system and by very considerable enlargement of its means and appliances for instruction, an increase in the number of students, and a consequent augmentation of its importance and influence," and express their "grateful sense of the earnestness with which he has labored to promote the best interests of the institution under his charge." At the Commencement in 1864 he delivered his farewell address and presented his successor as President of Columbia College.

CHAPTER XII

1864–1889

PRESIDENT FREDERICK A. P. BARNARD

On Wednesday, the eighteenth day of May, 1864, Frederick A. P. Barnard, S.T.D., LL.D., a graduate of Yale College of the class of '28, sometime Chancellor of the University of Mississippi, a man of varied and profound learning, of large experience and distinction in educational matters, was chosen President, the tenth of the line. His formal inauguration occurred on the third of the following October.

Dr. Barnard's election to the presidency came at a time opportune for him and for the College. He had thought profoundly upon the problems that demanded solution in College education, its modification as then practised, its extension and diversification, and its prolongation into fields of research — and found himself at the head of an institution eagerly groping for light on the very topics that had engrossed his attention. He was a devoted scientist, and a clergyman of the Episcopal Church. At the time of his installation the so-called conflict between religion and science was urged, denied, and warmly discussed. This and the projected School of Mines and Metallurgy, which was soon to be put into active operation, led him to take for his inaugural discourse the theme, "The Relation of Physical Science to Revealed Religion." The "conflict" has so completely subsided that the considerations he then presented seem now somewhat trite and stale — but they were fresh and pertinent then, were eloquently urged, and did their share in bringing about the practical settlement of the controversy.

FREDERICK A. P. BARNARD, S.T.D. (Mississippi), LL.D. (Yale)
President, 1864–1889

On his accession he found a good small College, strug- 1864
gling to make itself larger and better. It had, after long and careful deliberation, determined the principles, and settled the outlines, of its future development; but the time and the manner of accomplishing its desires, the innumerable details of the plan resolved upon, were, for the next twenty-five years, to engage the thought and employ the activities of Trustees and Faculties alike. Dr. Barnard soon assumed the leadership. The steps taken were sometimes fluctuating, aside or backward, but the general movement was forward. Truths that have become axioms in educational theory and practice were then but dimly seen, seen not at all, or subjects of heated dispute.

He actively supported the School of Mines and successfully urged the Trustees to become wholly responsible for it. In the new, enlarged, and fruitful field of labor in which he found himself, he worked incessantly and experimented boldly. He changed his own ideas as to the relative importance of studies, the best means of expansion, as to the amount of freedom proper to students in their conduct and in their choice of elective courses, and in other particulars — but in all the changes he had a distinct end in view and adapted himself to the necessary means to attain it. His series of annual reports show the gradual growth of his ideas and their modifications, and constitute a valuable contribution to knowledge in educational matters.

In September, 1864, Dr. John McVickar, after forty-seven years of active service, during which he was twice acting President, retired and became Emeritus Professor. He had been Professor of Moral and Intellectual Philosophy, Rhetoric, Belles-lettres, and Political Economy till the removal of the College, in 1857, when he was transferred to the Chair of the Evidences of Natural and Revealed Religion. His learning was extensive and accurate, and his character was such as to inspire respect

1867 and veneration and to endear him to all who knew him. When he retired, many old and distinguished alumni, who had been his pupils, attended the celebration held at the College grounds in his honor, to pay him their tribute of respect and affection. He died in 1868.

In February, 1866, a Chair of Geology and Palæontology was established, and was filled, May 7, by the election of Dr. John Strong Newberry, the eminent geologist and prolific scientific writer, upon whom subsequently the Geological Society of London conferred the Murchison gold medal awarded for distinguished scientific services in Geology.

In the fall of 1867 Dr. Charles Anthon, whose name holds a distinguished place in the history of the progress of classical literature in this country, and whose fame as teacher and expositor was high in Europe as well as in America, died after forty-seven years of continuous service as Professor.

Professor Drisler was transferred to the department of Greek, as Jay Professor, and Dr. Charles Short, a graduate of Harvard University, and sometime President of Kenyon College, Ohio, was made Professor of Latin.

Shortly after Dr. Anthon's death the Trustees established in his memory two prizes in Greek, of the respective values of $300 and $150, to be competed for by members of the junior class, through examination in an entire play of Æschylus, Sophocles, or Euripides, not read in the College course. In 1880 these prizes were discontinued.

In 1871 two fellowships in literature and science were instituted, open for competition, upon certain conditions, to the graduating class, each of the annual value of $500, to be held for three years; and, at the same time, six scholarships in Classics and Mathematics were established in the freshman and sophomore classes, and the like number in the junior class in Latin, in Logic, and English Literature, in History and Rhetoric, in Chemistry, in

Mechanics, and in Physics. Subsequently this scheme 1872
was remodelled by adding in the freshman class a scholarship in Rhetoric, by transferring from the junior class to the sophomore the scholarship in Chemistry, by adding in the junior class a scholarship in Greek, and by so arranging the whole as to make fourteen instead of twelve, each of the annual value of $100. In 1878 it was provided that the fellowships should be conferred annually by the Trustees on the written recommendation of the Faculty.

In 1872 Dr. Francis Lieber, the great publicist, writer on Public Law and Political Science, philosophical historian and teacher, died, aged seventy-two years. No successor to him was appointed. Four years later the chair which he filled was replaced by one of History, Political Science, and International Law, to which was elected Professor John W. Burgess, a graduate of Amherst College, Massachusetts, of the class of '67, and at the time of his selection, Professor of History and Political Science at Amherst.

In 1873 two prizes in Rhetoric and English Composition, of $100 and $50 respectively, were established, to be competed for by written theses at the end of the senior year. In 1880 these prizes were discontinued.

In 1877 Mr. John Jones Schermerhorn, an alumnus of the College of the class of '25, bequeathed $5000 to the College for the purpose of free scholarships, and on this foundation the Trustees established five free scholarships named the "Schermerhorn Scholarships," nomination to which is vested in the nearest male relative in each generation of the late Mr. Schermerhorn.

In the same year Mr. John Winthrop Chanler, an alumnus of the College of the class of '47, bequeathed $1000 to the College, the income of which was to be given annually to that member of the senior class who should be the author of the best essay, in English prose, on the

1880 history of civil government in America, or some other historical subject assigned by the Faculty. This bequest became available in 1879, and the first prize under it was awarded at the Commencement in 1880.

In 1879 a new building, with a frontage of two hundred feet on Madison Avenue and a depth of about sixty feet, was completed at a cost of over $200,000, for the use of the College. The name "Hamilton Hall" was officially given to this building.

In 1880 the Trustees provided that two hours a week during the freshman and sophomore years should be thereafter devoted to French, German, Italian, Spanish, Danish, or Swedish, at the option of the student; that in the junior year all the regular exercises in History, the English Language and Literature, and Anglo-Saxon, and in the senior year the same, with the exception of History, should be obligatory upon all the students; and all the other studies, to which were added German, French, Spanish, Italian, Danish, Swedish, and Icelandic, should be elective; and finally, that students should receive, on the satisfactory completion of their course, "the degree of Bachelor of Letters, Bachelor of Science, or Bachelor of Arts, according to the character of the studies chiefly pursued by them." In 1885 this plan was modified by restricting the choice as to modern languages, in the freshman and sophomore years, to German and French, with the proviso that the one chosen should be pursued until the end of the junior year; by making obligatory, during the junior year, ten hours a week in Greek, Latin, English, History and Political Economy, Logic and Psychology, other studies being elective; and by making all the studies of the senior year elective. In 1887 the choice as to modern languages, in freshman and sophomore years, was again enlarged so as to include German, French, Italian, and Spanish.

In October, 1880, a School of Political Science was

HAMILTON HALL, MADISON AVENUE AND 49TH STREET

Erected 1879

opened. Professor John McVickar had delivered, in 1818 1883
and subsequently, courses of lectures on Political Economy, the first, perhaps, that were ever delivered in an American College. Instruction in Political Science was part of the University plan of the Trustees, and Professor Francis Lieber, by the importance he gave it in connection with his historical and legal lectures, laid the basis for its fuller development.

In June, 1883, the Trustees provided that a course of collegiate study, equivalent to the course given to young men in the College, should be offered to such women as might desire to avail themselves of it, to be pursued under the general direction of the Faculty of the College ; admission to such course to be by a strict preliminary examination ; each student admitted to be entirely free as to where and how she should pursue her studies, to be examined in writing at stated times by officers of the College or their representatives, and to be entitled, at the end of her fourth year, or on the completion of any of the prescribed courses, to receive a certificate stating the subjects that she had pursued, and with what success. In February, 1887, the plan was modified by authorizing the conferring of the degree of Bachelor of Arts upon students who should satisfactorily complete a full course, equivalent to that for which the degree is bestowed upon young men.

No new students were received in the collegiate course for women after 1889, because of the establishment of a separate College for women, named "Barnard College," in honor of President Barnard.

On the completion of the Library Hall the several libraries of the College were consolidated into one collection. In 1881 Stephen Whitney Phœnix, of the class of '59, bequeathed to the College his private library, a choice collection of about seven thousand volumes, in fine condition, embracing many very valuable and some very

1885 rare works. In 1885 J. F. Loubat, Esq., of New York, presented to the Library books and plates which cost over $20,000; and in 1886 A. A. Low, Esq., of Brooklyn, New York, presented $5000 for the purchase of books.

Early in 1884 Lewis M. Rutherfurd, Esq., of New York, presented to the College a valuable collection of astronomical apparatus; also a large number of plates of star photographs, representing original work of great interest and importance, the utilization of which by the Department of Astronomy has been of service to science, and has met with wide and cordial appreciation.

In June, 1885, Professor John Tyndall, of London, presented to the College $10,800, to be used as a fund for the encouragement of scientific research. With this fund the Trustees established the John Tyndall Fellowship for the encouragement of research in Physics.

In the year preceding Dr. Barnard's assumption of office the number of students was one hundred and sixty-six. The course was obligatory throughout, except that German was a voluntary study. The Library was small (14,941 volumes, exclusive of pamphlets), but choice, especially in classical literature, was confined in its use to College officers, members of the upper classes, and such freshmen as might be designated by the President, and was open for delivery of books from 1 to 3 P.M. five days in the week during term time, holidays excepted. There were, in German, four prizes for excellence, — two in the junior class of $30 and $20, respectively, and two of like amounts in the sophomore class. There were, also, two "annual seminary prizes," one in Greek of $30 and one in English of $20, to be competed for by members of the graduating class who were candidates for the Episcopal Ministry; and the Alumni Association prize of $50 "to the most faithful and deserving student of the graduating class."

At the close of Dr. Barnard's presidency, among other changes and improvements, there were in the School of Arts [the College proper] two hundred and thirty-five students and in the "collegiate course for women" twenty-five, a total of two hundred and sixty. 1889

The College curriculum had been enlarged and liberalized. The course in the freshman and sophomore years was obligatory, except that members of these classes were required to choose German or French and continue the study of the language chosen till the end of the junior year. Members of the junior class were required to take ten of the fifteen hours a week allowed as a minimum, in prescribed studies noted above, the remaining hours being open to elective studies. All the studies of the senior year were elective, subject to the provision that at least fifteen hours a week must be taken. The electives offered covered a wide range, in the Greek and Latin Languages and Literatures, English Language and Literature, French, Italian, Spanish, German, and Icelandic; in Mathematics, Astronomy, Mechanics, Physics, Chemistry, Geology, and Palæontology; in Philosophy, Ethics and Psychology, History, Political Science and International Law, Political Economy and Social Science. There were large, varied, and important collections illustrating the several scientific courses given in the College, all well arranged and accessible to students. There was, also, an Astronomical Observatory, well equipped for purposes of instruction. The general and technical libraries that had been accumulated had been united and all housed in a fine building constructed for the purpose on the College block. The Library contained 99,433 volumes and 20,000 pamphlets; more than 500 different serials, including the leading periodicals, transactions of societies, etc., were regularly received; it was open to all officers, students, and graduates for borrowing and reference, daily, including all holidays and vacations, except Sundays, Good Fri-

1889 day, Fourth of July, Thanksgiving Day, and Christmas. There were the following prizes: Alumni Association prize of $50 and two "annual seminary prizes" as before noted; and the Chanler historical prize. There were fourteen scholarships of the annual value of $100 each; four offered for competition to members of the freshman class, and five each to members of the sophomore and junior classes respectively; also two fellowships conferred annually by the Trustees on the written recommendation of the Faculty upon such graduates as proposed to enter upon a course of study for higher attainments, in letters or science, and who were adjudged by the Faculty to be capable of attaining, and likely to attain, distinction in such course of study.

After twenty-five years of illustrious service as President, Dr. Barnard died on Saturday, April 27, 1889. He made the College the residuary legatee of all that he possessed: one portion of the fund devised, "to the amount of ten thousand dollars, to be set apart and to constitute the foundation of a fellowship to be entitled 'The Barnard Fellowship for Encouraging Scientific Research': the annual income from the sum so set apart to be devoted to the support or partial support of some Alumnus of the School of Arts, or of the School of Science known as the School of Mines of Columbia College, who may be recommended to the Trustees by the joint vote of the Faculties of the said schools, as evincing decided aptness for physical investigation, and who may be disposed to devote himself to such investigation for some years continuously." The remainder of the estate devised "to constitute a fund, under the name of 'The Barnard Fund for the Increase of the Library'; the income from the same to be devoted to the purchase, on account of the Library of Columbia College, of such books as from time to time may be most needed, but especially relating to physical or astronomical science; selecting, in preference, those which may be

likely to be most useful to persons engaged in scientific 1889
investigation. But of the income from the said fund I desire that so much as may be necessary shall be applied in the manner following: The Trustees of Columbia College shall cause to be struck, with suitable devices, a medal of gold, nine-tenths fine, of the bullion value of not less than two hundred dollars, to be styled 'The Barnard Medal for Meritorious Service to Science,' and shall publicly announce that a copy of the same shall be awarded, at the close of every quinquennial period, dating from the probate of this, my last will and testament, to such person, whether a citizen of the United States or of any other country, as shall, within the five years next preceding, have made such discovery in physical or astronomical science, or such novel application of science to purposes beneficial to the human race, as, in the judgment of the National Academy of Sciences of the United States, shall be esteemed most worthy of such honor." In a minute of a meeting of the Trustees of the College, held May 6, 1895, is recorded the following resolution: "Resolved that in accordance with the recommendation of the National Academy of Science, the first award of the Barnard Medal for Meritorious Service to Science be made at the coming Commencement to Lord Rayleigh, for his brilliant discovery of Argon." Lord Rayleigh, Professor of Natural Philosophy in the Royal Institution of London, England, declined to receive the medal on the ground that he would thereby be doing an injustice to Professor Ramsay, who was associated with him in the discovery. The Trustees thereupon ordered two medals to be struck, and President Low personally delivered them, in London, to the distinguished gentlemen.

This imperfect notice of President Barnard's administration may fitly close with the following extract from the minutes of a memorial meeting of the Columbia College Alumni held at the College in June, 1889: —

1889 "In 1864, at the date of Dr. Barnard's accession to the Presidency, the College was at a critical period of its history. It was ready for development and had begun to develop. The Law School had been established a few years previously and was in successful operation. The School of Mines was in process of organization. The Trustees had for several years been considering the expansion of the undergraduate course, and in connection therewith a system of University education. At this crucial period, the College happily obtained, as its chief counsellor and guide, Dr. Barnard, — a profound student of education, in sympathy with all forms of higher development, literary as well as scientific; of quick perception; peculiarly open to new ideas and prolific of them; of learning deep, exact and extensive in many fields; a classical and an English scholar, a fine mathematician, physicist, chemist, and adding to his severer accomplishments that of being a poet and a musician of no mean quality; a prolific, elegant and persuasive writer; a logical and convincing speaker; of sanguine, enthusiastic temperament, bold and persistent in the advocacy of his opinions and impervious to discouragement. He quickened into organic life the School of Mines; he gave vitalizing force to the extension and liberalization of the undergraduate course, to the founding of fellowships for the encouragement and assistance in their higher studies of earnest and able young men, to the extension of the Library and the liberalization of its management, to the project of a course for the higher study of political and historical subjects, and to the scheme for a broad and liberal system of postgraduate or University instruction, which the College had long but vainly desired. In brief, he gave Columbia College a new life and a new significance, and by his commanding position in many learned societies, by the force and elegance of his published writings, scientific, literary, legal, political, educational, and by his wide acquaintance with the foremost men of his time, he attracted attention to the College and did much to interest the community at large in it.

"'Age could not wither nor custom stale
His infinite variety.'

"He possessed, with such men as Gladstone and Bis- 1889
marck (it is a very rare quality), the fervor in age that he had in youth, and was as ready as he was before he had secured position and fame, to take up a new idea, a new project, and pursue it with as much vigor as if a long life were still before him, and all his reputation yet to make. It was this quality that made him a great President to the very last. With almost his latest breath, unable to write, and speaking with difficulty, he dictated letters of counsel upon what was ever nearest his great heart — Columbia College and her future.

"The departure of such a man is a loss beyond adequate expression. But he is not wholly lost. During his long period of service, longer and more distinguished than that of any of his predecessors, he so impressed himself upon the College in many vital particulars, that though dead he shall yet speak for all time to come."

CHAPTER XIII

1890–1901

PRESIDENT SETH LOW

On the 7th of October, 1889, Seth Low, of the class of '70, was chosen President to succeed Dr. Barnard. His installation took place at the Metropolitan Opera House on Monday morning, February 3, 1890, at half-past ten o'clock. "The proceedings in the Metropolitan Opera House," says a contemporary account, "which offers a fitting and stately scene for so dignified and impressive a ceremonial, were worthy of the great occasion. The vast and sympathetic audience and the distinguished assembly of guests, which was probably as notable a gathering of men most eminent in institutions of learning as has been seen in the country, except perhaps at the two hundred and fiftieth anniversary of the foundation of Harvard, listened with unflagging sympathy to a series of admirable addresses, in which not only the highest proprieties of the occasion were observed, but in the more important of which the tone was significant and unmistakable."

The Chairman of the Trustees, the Hon. Hamilton Fish, LL.D., of the class of '27, having been, at his own request, excused, by reason of uncertain health, from making the address of installation, the Rev. Morgan Dix, S.T.D., D.C.L., of the class of '48, was appointed to make the address on behalf of the Trustees.

The formal act of installation was performed by Mr. Fish.

Mr. Low, in his reply to the Trustees, spoke of the great development of the College in the twenty years since his

SETH LOW, LL.D. (HARVARD AND ELSEWHERE)
President, 1890–1901

graduation, and, in that connection, of the conspicuous services of his immediate predecessor. 1890

Then followed an address on behalf of all the Faculties by Professor Henry Drisler, LL.D., of the class of '39, senior Professor and acting President; an address on behalf of all the alumni by Frederic R. Coudert, LL.D., of the class of '50, President of the College Alumni Association; an address on behalf of all the students by a representative committee; and the President's inaugural address.

On the evening of the same day a dinner was given by the alumni in honor of the new President, of which was said at the time: —

"On Monday evening, February 3, 1890, was held the largest and most successful dinner ever given by the alumni of Columbia College. It was in all respects worthy of the Inauguration ceremonies of the morning at the Metropolitan Opera House.

"The large dining-hall of the Hotel Brunswick was everywhere resplendent with the colors of Columbia. Broad stripes of blue and white material covered the walls in graceful folds, and garlands of blue and white formed a frieze, beneath which hung banners and flags, trophies of Saratoga and Henley, the Harlem and the Thames, encircling the rooms. Banks of ferns and growing plants placed in front of the mirrors were surmounted by crossed flags and palm branches. Blue and white cloths covered the tables, and in front of each guest was a little volume, beautifully bound, containing the programme of the day, the list of speakers, and the menu. In addition to the large number in the main hall, nearly one hundred of the younger alumni occupied the large corner room as an annex."

In an account of the occasion given in *Harper's Weekly* of February 15 Mr. George William Curtis wrote: —

"President Eliot, of Harvard, in a frank and friendly speech, which fitly ended the proceedings of a memorable College day with the counsel and benediction of our oldest

1890 College, mentioned some facts in regard to Harvard similar to those respecting Columbia mentioned by President Low. Upon this subject the moral of the Harvard President's speech was that Columbia required a more liberal support from New York than it had received, and that with such support it would become an institution in extent and variety, no less than in quality, worthy of the chief city of the country. His concluding remarks upon the true range and scope of such an institution were in a lofty strain, which was as delightful as it was natural because it was the true voice of Harvard. It was the close of a day of renewed hope and faith and energy, which had recalled Jay and Hamilton, Livingston and Morris, Clinton and Verplanck, to illustrate the early leadership of Columbia, and to stimulate the just pride of a great city in its oldest school. The chief Colleges which were not too distant had come to congratulate their comrade. A host of proud alumni were gathered to cheer the happy event. 'It is a great day for Columbia,' said Mr. Coudert, the President of the Alumni, as with quaint humor and felicitous eloquence he presided at the dinner; 'but it is a greater day for New York.'"

President Low immediately addressed himself, with energy and skill, to the task before him. All about him were lying the component parts of a University, but they needed to be fitted together into a harmonious whole and endowed with a single spirit. He accomplished much by the close of the academic half year in which he was inaugurated. When he took charge "the attitude of the institution towards the student," to quote from the President's first annual report, "was one of multiplied opportunities, but opportunities held more or less out of relation to each other"; the several parts or schools composing the institution were separately vigorous, but lacked coördination and mutual helpfulness, each being administered by its own Faculty with too little reference to the others; the Faculties were severally devoted to the aggrandizement of their special charges rather than to the advancement of the institution in its entirety; advanced or

"graduate" courses were warmly encouraged and were 1890
being actively developed in most or all the departments, though in a somewhat irregular and desultory way, being dependent upon heads of departments rather than upon Faculties or a central governing body. The first requisites seemed to be — to place the "graduate" courses in charge of properly organized Faculties and to devise a central body to unify the institution and govern it in all its activities as one whole, instead of as so many parts. In May, 1890, the "first requisites" indicated were supplied. Further, it was ordained that a student was to matriculate simply as a student of Columbia, paying but one matriculation fee, and, under the necessary regulations, to become entitled thereby to all the facilities offered by the institution in any of its parts.

An immediate and important result of the reorganization so far effected was the permission given to members of the senior class in the College to take as elective courses counting toward their degree of A.B., courses under any Faculty (including the professional faculties) designated by such Faculty as open to them. This privilege, could be, and soon came to be, used to shorten the time required for the college and a professional course combined.

"Thus at one stroke," as the President remarked in his first annual report, "Columbia ceased to be divided into fragments, and took upon herself the aspect of a University, wherein each department was related to every other, and every one strengthened all."

In May, 1891, the College received the bequest of $100,000, left by Charles M. Da Costa, a Trustee of the College and an alumnus of the class of '55, who had died the preceding summer. His legacy was left to the discretion of the Trustees for the establishment of a Professorship. It was used for the establishment of a department of Biology, at the head of which was placed Henry

1891 Fairfield Osborn, Sc.D., of Princeton University. By the appointment also of Professor Osborn as Curator of Mammalian Palæontology in the American Museum of Natural History in New York, the first step was taken toward the series of affiliations with important institutions in the city which Columbia was to make.

In the course of the year 1891 arrangements were made by which continued and effective service on the part of officers was to be especially recognized. An ordinance was adopted, granting to each Professor the privilege of taking, on half-pay, a year's leave of absence once in every seven years; and providing that any Professor after a service of fifteen years or upward in the College, and who is also sixty-five years of age or over, may, if he choose, retire on half-pay.

A notable academic event occurred in the latter part of the collegiate year 1893–1894. At that time was celebrated the semi-centennial in the service of the College of Henry Drisler, LL.D., of the class of '39. Professor Drisler had held the chairs of both Latin and Greek, had twice been acting President, once in 1867 during President Barnard's absence as United States Commissioner to the Paris Exposition, and again in 1888 and 1889 during President Barnard's last illness and before the inauguration of President Low, was Dean of the "School of Arts," an office created for him at the close of his last term as acting President, and had acquired, as a classicist, a wide and enviable reputation. The College Alumni Association held a public reception in his honor to testify their respect and veneration. A volume of "classical studies," each article in which was written by a former pupil as a tribute of affection, was given to him at Commencement by one of the contributors, his colleague, the late Professor Merriam. At the Commencement, also, the Rev. Dr. Dix presented him, on behalf of the Trustees, with a beautiful gold medal, struck in commemoration of the

event, together with an appropriate minute printed on vellum. The Trustees established in the College a fellowship in Classical Philology, of the value of $500 a year, to be known as the "Henry Drisler Fellowship of Classical Philology"; and President Low added to his numerous other and splendid gifts to the College the sum of $10,000 to endow a "Henry Drisler Classical Fund" for the benefit of the departments of Greek and Latin, the income to be "placed at the disposal of these Departments for the purchase of books, maps, charts, busts or equipment of any kind whatever that will tend to make instruction in the classics at this University more interesting and more attractive."[1] 1894

From the time of Mr. Low's accession to the Presidency, the interest of the community in the College was greatly stimulated and manifested itself in substantial benefactions.

In addition to numerous contributions of books, and of money for books and collections and for the founding of prizes, aggregating a large sum, there were given in generous amounts for account of the purchase of the new site that had been selected on the upper west side of the Island at 116th Street. For this purpose, Messrs. J. Pierpont Morgan and Cornelius Vanderbilt gave, each, $100,000; Mr. D. Willis James, $50,000; Mr. A. A. Low, $15,000; Messrs. R. Fulton Cutting and Alfred C. Clark, each $10,000; and the following $5000 each: Messrs. Samuel D. Babcock, Abram S. Hewitt, Morris K. Jessup, Seth Low, Oswald Ottendorfer, Henry Parish, Jacob H. Schiff, and Samuel Sloan. Numerous smaller amounts were given, and through the College Alumni Association $50,000 were subscribed.

The legacy of $100,000 left by Mr. Da Costa has already been noted.

In the will of the late Daniel B. Fayerweather, Columbia was named as one of the institutions to receive, out of

[1] Professor Drisler died November 30, 1897.

1893 his most generously devised estate, $200,000. The amount was increased by over $100,000, through the action of the executors in awarding to Columbia a portion of the residue of the estate left after payment of the several bequests specified in the will. In commemoration of this bequest, the building to be ultimately devoted to the department of physics was named "Fayerweather Hall."

On her death, in 1892, the widow of President Barnard added to the bequest of her husband for the benefit of the College her own estate, amounting to about $20,000.

In 1893 Charles Bathgate Beck, of the class of '77, bequeathed to the College $2000 for the endowment of prizes, $8000 for scholarships, and one-fourth of his residuary estate, consisting of an extensive tract of land in the Borough of the Bronx which is likely to be of great value.

Mr. Joseph Pulitzer, of New York, gave the College $100,000, in return for which the College agreed to pay the tuition of a number of boys, not exceeding ten a year, during the three years which they must pass at a high school in preparation for College and to grant, to such of them as might enter Columbia, free tuition. The conditions have since been modified in view of the establishment of the public high schools of the city.

The Hon. Hamilton Fish, of the class of '27, whose service to the College as Trustee and Chairman of the Board was long and conspicuous, who served his native State well in legislative halls and as Governor, and the country at large as Senator of the United States from New York and as Secretary of State under President Grant, died in September, 1893, and left to his *alma mater* a bequest of $50,000.

President Low, with characteristic munificence, made himself responsible for a Library building at the new site on Morningside Heights, to cost $1,000,000; Mr. William C. Schermerhorn (in addition to other costly

gifts) provided funds for a building to cost $450,000; 1895
and the children and nephew of the late Frederick Christian Havemeyer gave, in his memory, $450,000 to erect a building for chemical lecture rooms and laboratories. Mrs. Elizabeth Mary Ludlow offered real estate and personal property for the endowment of a fund for instruction in Music, as a memorial of her son, Robert Center; the Trustees accepted, with "their grateful thanks for her munificent gift," and, with her permission, designated the Fund as the "Robert Center Fund for Instruction in Music, founded by his Mother."

In recognition of President Low's great personal generosity, the Trustees established in the College twelve scholarships, to be known as Brooklyn Scholarships, to be awarded by competition to boys resident in Brooklyn and prepared for College in any school in Brooklyn, public or private, each scholarship to be of the annual value of $150, to be held for the full College course of four years, the holder to pay tuition and all other fees; scholarships in Barnard College; University scholarships; a University Fellowship; and a "Seth Low Professorship of History." The President was requested to nominate the first incumbent of the Professorship, and, on his nomination, William M. Sloane, Ph.D., L.H.D., of the class of '68, for many years Professor in Princeton University, first of Latin and then of History, a historian of repute, author of the *Life of Napoleon*, became the first Seth Low Professor of History.

It had been evident, for some time, that the institution had become substantially a University in all but name, and that its corporate title, "Columbia College," could no longer be used with convenience, propriety, or advantage to cover its manifold activities. The original College had come to be designated, for distinction, the "School of Arts," an unfortunate and somewhat misleading title that had become current to distinguish, in

1896 printed documents, the "College proper" from its several "associated schools." The Dean of the College, in his report to the President for the year 1894–1895, called attention to the desirableness, on many accounts, of allowing the "School of Arts" to resume its rightful name of Columbia College; and the President, in his report to the Trustees for the same year, said that he cared nothing about the title of the corporation; "but I do care very much about our statutory and educational nomenclature; and I shall shortly submit proposed amendments to the statutes intended to give effect to the use of the name University for the institution as a whole, and of Columbia College for the School of Arts."

Accordingly he presented his amendments, which were adopted. The title of the corporation remains unchanged, but in February, 1896, it was, "Resolved That, in all official publications hereafter issued by or under authority of the Trustees, all the departments of instruction and research maintained and managed by this corporation may, for convenience, be designated collectively as 'Columbia University in the City of New York,' or 'the University'; and the School of Arts, as the name is now known and described, may hereafter be designated as 'Columbia College,' or 'the College.'"

In 1892 the purchase of a new site and removal thither was determined upon. The situation at 49th Street and Madison Avenue had always been regarded as temporary. It had been intended to make use of a portion of the "Botanic Garden" property, between 49th and 50th streets fronting Fifth Avenue, for permanent buildings, but that design had been abandoned. Subsequently, in 1872, property was purchased near 161st Street and Ridge Road, containing about eight acres, and known as the "Wheelock property." After the land had been acquired, reluctance to place there buildings for the College and its several parts—the Law School and the School of Mines, and

THE UNIVERSITY GYMNASIUM

further accommodations for development of the University system that was in contemplation and preparation — grew up and became sufficiently strong to cause delay and then relinquishment of the project. But the necessity of removal from the cramped quarters at 49th Street, and the noisy neighborhood of a great railroad, and that at no distant day, was constantly urged upon the Trustees by President Barnard. And the Trustees frequently took action, looking to the carrying out of Dr. Barnard's recommendation. But no plot suitable in size and position was suggested till Mr. John B. Pine, of the class of '77 and one of the Trustees, called attention to the four blocks of land owned by the New York Hospital and occupied by the Bloomingdale Asylum, lying between 116th and 120th streets, Amsterdam Avenue, and the Boulevard. In December, 1891, an option was taken on the land with the buildings thereon, for $2,000,000; in April, 1892, the option was closed and the question of the future home of Columbia was settled. 1892

The site thus acquired was not only of large proportions, consisting of four undivided city blocks about eighteen acres in extent, nobly situated on the crown of the Island of Manhattan, overlooking a grand sweep of the Hudson River, but had also much historic interest. It was in this immediate vicinity, and partly upon this very ground, that the Revolutionary battle of Harlem Heights was fought, and, for the first time in that contest, the raw undisciplined American volunteers showed that their valor and persistence could successfully withstand the royal troops, and the ground was fitly consecrated to high purposes by the blood of early martyrs to the cause of rational freedom. Again, in the War of 1812, it was a scene of defensive activity in which the College, as such, had a part. It appears that the students and alumni of the College participated, as a body, in the preparations for the defence of the city against the British by throwing up fortifications at Har-

1895 lem Heights, as witness the following advertisement that appeared in the *Evening Post* of October 25, 1814: —

> "*Notice.* Vincit amor patriæ laudumque immensa cupido . . . Virg.
>
> "The students and former graduates of Columbia College, together with such other young gentlemen as are desirous of performing another day's labour on Harlaem Heights, are requested to assemble in the College Green on Wednesday, the 26th inst., at half past 6 o'clock, for the purpose of proceeding to the same.
>
> "By order of the Committee."

The College was not to take possession of the property till January 1, 1895 (the date was afterward changed to October 1, 1894), and rare opportunity was thus afforded, and made use of, for careful consideration and adoption of the best plans for its development for university purposes.

The first corner-stone to be set in its place of any of the new buildings was that of the Library, given by Mr. Low as a memorial of his father, the late Abiel Abbot Low; and this occurred December 7, 1895. In compliance with the President's request, the ceremonies were very simple and were held in presence of the Trustees and a few Professors and friends. The Rev. Dr. Van De Water, Chaplain of the University, officiated at the service, President Low laid the corner-stone, and the Rt. Rev. Bishop Potter made a brief address.

The formal dedication of the new site and the laying of the corner-stones of Schermerhorn Hall, the gift of William C. Schermerhorn, of the class of '40, Chairman of the Trustees, and designed for the accommodation of the natural sciences, and of the Physics Building, took place on Saturday, May 2, 1896. At 12 o'clock on that day, in the presence of a large number of alumni and other friends of Columbia, the ceremonies began with the Physics Building; the Rev. Dr. Marvin R. Vincent,

JOHN HOWARD VAN AMRINGE, L.H.D. (COLUMBIA), LL.D. (UNION)
Acting President, 1899

of the class of '54, officiated as Chaplain, Professor Ogden 1896
N. Rood, Professor of Physics, laid the corner-stone, and an address was made by Professor J. H. Van Amringe, of the class of '60, Dean of the College. Immediately thereafter, at Schermerhorn Hall, the Rev. Dr. Dix, of the class of '48, Rector of Trinity Parish, officiated as Chaplain, the corner-stone was laid by Mr. Schermerhorn, and Dr. Henry F. Osborn, Da Costa Professor of Zoölogy, made an address. In the afternoon the site itself was formally dedicated in the presence of five thousand people, including the highest officers of the state and the city, women representing all that is best in refined and cultivated society, and "men renowned in law, literature, art, science, and commerce." The exercises were opened with prayer by the Rev. Dr. Edward B. Coe. The first address was made by President Low. "We are met to-day," said he, "to dedicate to a new use this historic ground. Already it is twice consecrated. In the Revolutionary War this soil drank the blood of patriots, willingly shed for the independence of the land. Since then, for three generations, it has witnessed the union of science and of brotherly kindness devoted to the care of humanity suffering from the most mysterious of all the ills that flesh is heir to. To-day we dedicate it, in the same spirit of loyalty to the country and of devotion to mankind, to the inspiring use of a venerable and historic University."

The presentation of the national colors on behalf of Lafayette Post, Grand Army of the Republic, was made by Rear-Admiral Richard W. Meade, United States Navy, Post Commander. On behalf of his comrades, he presented "to the President and Trustees of Columbia University, the flag of our country, to be hoisted at the staff erected by Lafayette Post in front of the Library building, where, resting upon a granite and bronze support, typical of the enduring nature of the principles symbolized by the banner of the nation, there will be found on the

1896 pedestal, in letters of bronze, the charge to the students of Columbia to 'love, cherish and defend it.'"

President Low, in accepting the flag, said: "In the name of the men of King's College who fought for the independence of the Colonies, and did so much to establish the Government of these United States; in the name of the men of Columbia College who in the War of 1812 and in the Mexican War fought under this flag in the country's quarrel; and in the name of the men of Columbia University, who fought, as you fought, in the War for the preservation of the Union, and who helped to bring unscathed out of the storm of the War this glorious flag, I pledge you for this University that we shall 'love, cherish, and defend it.'"

The Dedication Ode in Latin, written by Dr. Harry Thurston Peck, of the class of '81, Professor of Latin, was sung to the air "Integer vitæ."

Then followed the principal address of the day by the Hon. Abram S. Hewitt, LL.D., of the class of '42, a former Mayor of the City of New York. In beginning his noble oration, distinguished for learning, wisdom, and eloquence, Mr. Hewitt said: —

"This occasion and these impressive ceremonies are intended to recognize the trinity of religion, learning, and patriotism. It is most fitting that such a conjunction should be celebrated on these Morningside Heights, consecrated by the blood of heroes in a conflict which first showed the ability of the Continental militia to hold their own against trained British soldiers whose valor had been proved on many a hard-fought field. It is meet and right that the ministers of the churches which were associated in the foundation of King's College, and that the Bishop and other clergy of the noble Cathedral which hard by is slowly rearing its majestic proportions to Heaven, should lend to this occasion the benediction of their presence and their prayers. It accords with the fitness of things that the Presidents and Faculties of the great sister Institutions of Learning, which are the pride of the closing, and the

hope of the coming, century, are here to rejoice with 1896
Columbia in the day of her rejoicing, and to renew with her the pledge to train up a free people in the virtue and knowledge on which their liberties depend. It is well for the Governor and the Regents of the University of the great State of New York, by whose wise and timely legislation Columbia College was re-organized and endowed with an estate, which enables it at this late day to realize the expectations of the far-seeing legislators who declared that she was to become 'the mother of a University,' to witness the fulfilment of the prophecy of the fathers, on a scale of grandeur beyond the dreams of the most sanguine friends of sound learning. But above all, the presence of the Mayor of New York and of the members of the Corporation, its aldermen and commonalty, in this great audience assembled, is proof of the deep and abiding interest which the city has in the final dwelling-place of an institution which, as I shall hope to show, has contributed largely to its growth, is the most striking monument of its progress, and must be its guide in the development which promises to make it chief among the cities of the world.

"Such a rare concurrence of piety, learning, wisdom and authority indicates that this occasion has a significance which demands and justifies an explanation, familiar as it must necessarily be to the students of history and to the friends of education, but necessary in order to comprehend the genesis and the mission of the new University, destined to radiate its influence for good in all time to come from these buildings which we are here to dedicate to the service of God and man. Let it be remembered, however, that we are here not to dedicate buildings alone, but also to dedicate to the responsibilities and duties of advancing civilization the wealth, the energies, and the potentialities of the millions of men who will in the ages to come constitute the population gathered around this centre of light and learning."

President Eliot, of Harvard University, then presented "the hearty congratulations of the sister Universities" to Columbia "on the acquisition of this spacious site, of these rising buildings, and of numerous important additions to the material and intellectual resources of the University,"

1897 and to "the City, too, that its chief University is to have here a setting commensurate with the work of its intellectual and spiritual influence."

The dedication exercises were closed by the benediction pronounced by the Right Rev. Dr. Henry C. Potter, Bishop of New York.

In the following November were laid the corner-stones of Havemeyer Hall and the Engineering building. In October, 1897, the six new buildings, viz., the Library, Schermerhorn, University, Fayerweather, and Havemeyer Halls, and the Engineering building, were completed, and two buildings erected by the previous owners were remodelled and designated "College Hall" and "West Hall." The former was assigned to the use of the College until a building for its permanent occupation should be erected. The work of the College and of all the schools of the University, excepting the Medical School which had been previously established in 59th Street, was transferred to Morningside Heights, and was there begun on the morning of Monday, October 4, with a chapel service in the great reading room of the Library, at which the President of the University made a brief address, and a hymn, written for the occasion by Mr. Charles A. Nelson, was sung.

The building known as "College Hall," though unworthy of the name and increasingly inadequate for the use to which it is still applied, has served a useful purpose in aiding to preserve the identity of the College, and has witnessed the development of its curriculum and the growth of its student body far in advance of any previously reached. In the last year at 49th Street (1896–1897) the number of students in the College was three hundred and fifteen, larger than that in any previous year. The number in the first year at Morningside Heights was three hundred and thirty-five, and this has increased to five hundred and four in the present year (1903–1904).

Generous provision is made for the assistance of needy 1897
students of character in seventy-two scholarships of the annual value of $150 each. These scholarships are intended to be academic honors, and the holders are divided into three groups. The first group contains only those whose work entitles them to high academic distinction. The second consists of students of marked excellence who have not attained a position in the first group. The third comprises meritorious students to whom scholarships have been awarded on the grounds of special claim. Twenty of these scholarships are competitive: Alumni Competitive (4), one awarded annually; Hewitt and Harper (2 each), endowed by the gift of Abram S. Hewitt, class of '42, and by the bequest of Joseph W. Harper, class of '48, open annually for competition to graduates of New York City high schools; Brooklyn (12), founded in recognition of Mr. Low's gift of a memorial building, three of them open for competition annually to residents of Brooklyn who have received their training in either the public or the private schools of that borough. Eleven scholarships are open for award, without competition, to students of any class, whose record for ability and scholarship are satisfactory, viz.: Faculty (6); Beck (1), established in recognition of the liberality of Charles Bathgate Beck, class of '77; Campbell (2), established by Miss Maria L. Campbell and Miss Catherine B. Campbell in memory of R. B. Campbell, class of '44, and H. P. Campbell, class of '47; Class of '48 (2), established by a member of that class. Twenty-one of the scholarships are endowed, viz.: Schermerhorn (5), endowed by John Jones Schermerhorn, class of '25; Moffat (2), endowed by William B. Moffat, class of '38; Stuart (2), endowed in memory of Sidney B. Stuart, class of '80, and Eugene T. Stuart, class of '81, by their grandmother Cornelia A. Atwill; Alumni Association (4), established by the Trustees in recognition of the interest the Alumni

1897 Association has always shown in the affairs of the College (the foregoing thirteen are open to Freshmen only); and Society for Promoting Religion and Learning, two in each class, founded by that Society and awarded upon its nomination. Twenty of the scholarships are called Benefactors' Scholarships and were established by the Trustees in recognition of the liberal gifts for the purchase of the site on Morningside Heights by those after whom they are named, viz.: Morgan (5), Vanderbilt (5), A. A. Low (3), Cutting (2), Clark (2), Sloan (1), Parish (1), Schiff (1); these are open to students who have been not less than one year in the College.

In addition to the aid given to students by scholarships, there is a standing committee whose duty is to put students desiring to work their way through college, especially those coming from elsewhere than New York or the immediate vicinity, in the way of earning enough for their partial or complete support, or if possible to extend assistance to them in other ways while they are pursuing their studies in the College. A students' loan fund of $5000 was, in 1896, established by a gift from Jacob H. Schiff of New York.

In his annual report to the President for the year ending June 30, 1897, — the last year at 49th Street, — the Dean of the College gave a summary of its educational history, which may be given in substance here: —

The connection of Columbia College with the present site will cease with the close of the present academic year. The twoscore years that will have elapsed between the abandonment of College Place and the occupancy of the site on Morningside Heights have been years of anxiety, endeavor, change, and substantial advancement. The year of the removal to 49th Street was signalized by the adoption, after long and careful deliberation on the part of the Trustees, of a statute remarkable for educational foresight and wisdom. It provided, in brief: a university course of study to be conducted in three schools, viz.:

a School of Letters, a School of Science, and a School of 1897
Jurisprudence; an extended and liberal undergraduate course, involving three elective courses in the senior year, respectively adapted to fit students to enter upon the several university courses; prize scholarships; fellowships, with or without stipends.

The immediate results were an enlarged curriculum and the addition of several Professors to the Faculty of the College. In the fall of 1857 the elective courses in the senior year were inaugurated. A year later the university course of study was put into partial operation. The Statute of 1857, though delayed in its detailed execution by the anxious and disturbed period of the Civil War and by the restricted condition of the finances of the College, has found expression in the Schools of Law, Medicine, Applied Science, Political Science, Philosophy, and Pure Science. The choice allowed to seniors in 1857 was withdrawn after three years. After that time the policy with regard to elective studies fluctuated until fixed, for the time being at least, by the adoption of the "new curriculum." Prizes for encouraging the study of Greek and of English have been established, as have likewise scholarships for competition among members of the three lower classes, and fellowships in literature and science for members of the senior class.

"The course of study in the College has engaged constant attention; has, as ideas have developed and expanded, been modified from time to time, and has finally resulted in an academic curriculum, to be put into effect on the removal to Morningside Heights, which is so constructed, it is believed, as to secure to every one who follows it successfully all the elements of a liberal education as agreed upon by the best educational authorities in this country, at the same time that he may fit himself, better than ever before, to pursue with advantage advanced university courses, or prepare himself for the professional or other occupation to which he may choose to devote his life. This brief recapitulation of salient points in the history of progress may serve to show that the brooding period passed here has not been idly or unprofitably spent, that the College has, indeed, done meanwhile its full share in the discussion and attempted solution of the profound pedagogic problems of the time, in the amendment,

1900 improvement, and extension of all the educational means employed in making sound scholars, thoughtful men, and good citizens."

The curriculum put into effect in 1897–1898, with its subsequent modifications, may be found in Appendix C.

In 1900, a restatement of the requirements for admission was made to meet a difficulty that had been for some time apparent and that, after the opening of the public high schools in New York City, had become serious. The difficulty lay in the fact that a considerable number of students, particularly in the high schools, do not, till late in their course, form a desire to enter college, and then find that they are unable to do so because of lack of preparation in some required subject, generally Latin. "The restatement referred to, while not diminishing the amount of preliminary preparation requisite, is so made as not to necessitate the offering of Latin for entrance. Greek was eliminated as an entrance requirement three years ago. Of course either or both of the classical languages may still be offered, but there is a distinct difference in the attitude of the College to the two languages. When Greek was eliminated from the studies prescribed for admission, it was eliminated also from those prescribed for graduation. This is not the case with Latin, which, if not offered for entrance, must be taken for three consecutive years after entrance. So that, without changing the requirements for the degree of Bachelor of Arts, the advantages of the College are made available to many who would otherwise be excluded." (Report of the Dean of the College, 1900.)

In September, 1901, President Low was nominated for the Mayoralty of New York City by an organization of citizens styled "The Citizens' Union." He accepted the nomination and resigned the presidency of the College at the stated meeting of the Trustees in October, 1901. The

Trustees accepted his resignation and appointed Professor Nicholas Murray Butler Acting President. 1901

In accepting his resignation, the Trustees adopted a minute expressive of "their affectionate regard for Mr. Low personally and of their high opinion of the value of his services to the University," and saying further: "Mr. Low has now served as Trustee for twenty years. He has served as President for exactly twelve years, having been elected October 7, 1889, — a period marked by changes of the utmost importance, which may fairly be said to have created a new Columbia. A great University has been organized out of a group of scattered and unrelated schools. It has been moved to new and generous quarters that worthily accommodate it and that invite the large expansion which is certainly before it. It has established intimate and satisfactory affiliations with Barnard College and Teachers College. Its educational organization is thorough and effective; a strong enthusiastic common life now pervades and inspires every part; the number of its teachers and students was never so large; its educational prestige was probably never higher; and in every quarter, both inside and outside the University, the utmost good will prevails. Such a record of achievement tells its own story of the head of the University; but it would be a most incomplete account that failed to make some reference to Mr. Low's extraordinary and unwearied generosity. At his own cost he has built the University Library building; he has established trust funds for the encouragement of study and research, and he has contributed in unnumbered ways to supplement the funds of the University, and to help every good cause in which its members were interested."

CHAPTER XIV

COLLEGE LIFE

On removal to Morningside Heights a great impetus was given to outdoor sports and a specific college life.[1] Football has risen into prominence and is practised with enthusiasm and success. Many victories have been won and the University "Trophy Room" contains numerous prizes gained on the "gridiron." A like remark may be made as to other forms of sport, as gymnasium contests, baseball, basketball, fencing, rowing, track and field athletics.

Athletic sports have had, for reasons that are apparent, but slow recognition at Columbia. Sporadic attempts were made in that direction with fitful and brief success. Football of a mild type seems to have existed as a campus diversion as early as 1824, when seniors and sophomores lined up against juniors and freshmen. President King, who was fond of outdoor exercises and sports, attempted to interest the students in them, and met with but little encouragement. He induced the Trustees to appoint a teacher of boxing and fencing for the benefit of the students. The class of '59 had a boat crew in which they took great pride. Baseball was indulged in occasionally, and in 1867 a baseball association was formed. Class teams were organized, and a representative college team played with New York University, with City College, Yale, and Princeton. In 1869 an Athletic Association was formed to introduce and foster at Columbia rowing

[1] With reference to this the writer is much indebted to Mr. William Aspenwall Bradley of the class of '99.

and track and field sports. College contests in track ath- 1876
letics have been held since 1869, and in 1881 class games were instituted. Columbia joined the Intercollegiate Athletic Association in 1876, and in 1877 won the championship at Mott Haven. Since then the College has won the championship several times and held the cup for a number of years in succession. The Gymnasium, with all the conveniences and modern appliances that go to make a model of its kind, has increased the general interest in athletics and developed the capacity for their successful practice. The Athletic Field of about twenty acres at Williamsbridge, in the purchase and preparation of which the College Alumni Association largely aided, contributes to the same ends.

For thirty years past, rowing has had much attention and excited a great deal of enthusiasm. In 1873 a crew was entered in the first intercollegiate regatta, held on the Thames River at Springfield, Massachusetts, and came in among the first four crews. The second intercollegiate regatta on Saratoga Lake in 1874 ended in a great triumph for Columbia. Saratoga was crowded with summer visitors, among whom was a large and representative body from the city of New York. These latter adopted, with great unanimity, the Columbia College crew as their own; and when that crew won the race in brilliant style, the village went wild with enthusiasm and delight. On the return of the crew to New York, they were received like a conquering army, with music, procession, and the booming of cannon. In 1876 a beautiful College boat-house was erected on the Harlem River at Mott Haven, costing over ten thousand dollars, of which the Trustees voted about two-thirds, and the remainder was raised by subscription among the alumni and friends of the College. In 1878 a four-oared crew was sent to England to contend in the races at Henley. This crew, consisting of Edward E. Sage, Cyrus Edson, Harry G. Ridabock, and Jasper T.

1878 Goodwin, defeated the pick of the English college crews and the four from Dublin University, and won the Stewards' Cup — the first and, so far, the only time that an American college crew has succeeded in bringing home a foreign trophy for superiority in rowing. So great was the satisfaction in New York at this victory that, on the return of the crew, they were met at the steamship landing by a large concourse of alumni and other citizens, including members of the Common Council of the city, and escorted up Broadway to Delmonico's in 14th Street, where a great rejoicing was held. Subsequently the Common Council adopted resolutions of congratulation to the crew and the College which were signed by "Smith Ely, Mayor," were beautifully engrossed and framed by the city, and now hang in the large and well-filled "Trophy Room" of the University. Interest in boating has continued to be active. In 1896 Mr. Edwin Gould, a member of the class of '88, gave to the College a fine boat-house on the Hudson River at the foot of 115th Street, to replace the one at Mott Haven which was disposed of on the removal of the College from 49th Street, and has since given $10,000 as a fund in aid of rowing. As this account is being written, word comes that the Columbia oarsmen have won five out of the six races in which they were entered in the 1904 Decoration Day Regatta on the Harlem River, carrying off five beautiful flags and more than sixty per cent of other prizes offered for competition.

As has been before noted, literary societies and debating clubs constituted, at first and for a long time, the principal activity of students aside from the life of the class room. The establishment of the Philolexian and Peithologian Societies, in 1802 and 1806 respectively, has been referred to. These societies grew out of class debating clubs, were all inclusive of existing student interests, and between them embraced by far the greater part of the student body. They held annual exhibitions which were public

THE EDWIN GOULD BOAT-HOUSE

THE SWIMMING POOL

NORTH FRONT OF PROPOSED COLLEGE HALL

1897 and conducted by themselves ; they invited prominent alumni to address them and printed the addresses at the expense of the Club treasuries ; they gathered a considerable and very good library which, later, was given to the library of the College ; they flourished till the rise of fraternities and athletic associations, and then they suffered a decline. By 1877 they had become so feeble that a new society was formed, the Barnard Literary Association, to revive interest in debates and public speaking. The old societies then took a new lease of life and, with the "Barnard," concerned themselves not so much with literary practice as with the cultivation of debating.

The Peithologian Society became extinct in 1894. The Philolexian Society and the Barnard Literary Association are still vigorous. Together they form the Debating Union and are open to members from the entire University. The Union entered the field of intercollegiate debating by defeating the Harvard Forum in 1897. Annual debates are held with the various universities and colleges, in which the Union has an honorable record. Fall and spring intersociety debates are also held, and occasionally each society holds, independently, outside debates with local clubs. A Freshman Debating Society was founded in 1901.

College journalism had its vague beginnings in the literary societies. The first student publication on record was the *Philolexian Observer*, a little manuscript paper starting in 1813 and surviving only a few months. The *Observer* was strictly a private appurtenance of the Philolexian Society, was written by one of the members, and read by him at its weekly meetings. The *Academic Recreations*, the first printed publication at Columbia, was published by the members of the Peithologian Society, and had a place in the general college world as well. It was started in February, 1814, and ran only to the end of the college year. It was strictly literary in character ; the

names of its editors and even of its contributors are unknown. There appears to have been no publication by the students after this, until 1848, when the series of *Annual Catalogues* was begun. The first catalogue was published by Stephen R. Weeks, who, as janitor, assistant librarian and proctor, held for fifty years a unique position in the life of the college community. In the same year the senior class brought out a second *Annual Catalogue*. The catalogue became thenceforth a regular college year-book, published by the seniors and containing information of interest to undergraduates, such as fraternity lists and the like. In 1857, owing partly to the extravagance of the publication committee, as it was then considered, and partly to other considerations, the book was taken in hand by the Trustees, and out of it, under their official management, was developed the regular yearly catalogue of the University. 1848

Columbia's next literary venture was made in connection with many other colleges, universities, and professional schools, in a publication styled the *University Quarterly*. This was a quarterly review of from one hundred and fifty to two hundred pages and was conducted from New Haven by "An Association of Collegiate and Professional Students in the United States and Europe." It published essays, literary, historical, educational, and "news articles" for the various institutions represented. The first Columbia article appeared in the number of April, 1860, and was an historical and educational sketch of Columbia College by J. Howard Van Amringe, the Columbia editor, who was then a senior. Subsequent articles by Columbia men were news articles by W. F. Whitehouse, E. Walter West, and C. Sigourney Knox; an article by this last-named contributor in July, 1861, is particularly interesting because of the picture it gives of Columbia in the early war time. Essays were contributed on *Academic Ethics* (anonymous); the *Library of Columbia College*, by W. A. Jones, A.M.,

1867 Librarian ; the *Columbia College Law School*, by Professor Theodore W. Dwight, LL.D. ; and *American Colleges*, by Abraham Suydam. The *Quarterly*, though apparently well received, ended with its second volume in 1861.

In 1864, a publication similar in purpose and character to the *Catalogue*, but more meagre and modest in size and appearance, was started by the junior class, the class of '65, under the name of the *Columbian*. This title was changed next year to the *Columbiad*, and so continued till 1890. In 1868 the publication was changed from a four-page sheet to book form. In 1878 the School of Mines, which had formerly coöperated with the College in editing the *Columbiad*, started a similar publication of its own, the *Miner*. These two books ran a parallel course, as illustrated handbooks of undergraduate affairs, until 1890, when the two books were reunited in one — the *Columbian*. The *Columbian* continues to be published yearly by the junior class of the College and the third year class of the Schools of Applied Science, the former supplying whatsoever of a literary character pertains to the book, and the latter, through the School of Architecture, the pictures which have at times been so remarkable for beauty and originality as to gain the *Columbian* a unique place among college publications.

The first real undergraduate literary publication at Columbia was *Cap and Gown*, begun in 1867 and issued once a month. It had the double purpose of recording and commenting on Columbia affairs, and developing undergraduate literary expression. In 1873 the School of Mines was given editorial representation and the name of the paper was changed to *Acta Columbiana*. This paper, first a monthly, then a fortnightly, and soon afterward a tri-weekly, continued until 1885 when it was absorbed by an offshoot from the parent stem, the *Columbia Spectator*. *Acta Columbiana* played an important part in its day. It was the first Columbia paper to have an

office of its own. This was secured in 1876, a part of 1880
the coat-room having been boarded off for this purpose in the old building, irreverently called "Maison de Punk." The *Acta* office was at first unpopular with the student body that resented the sequestration of any part of its common property for the private use of an editorial board. However, after there had been some hard fighting about the walls of the little sanctum, the editors were left in undisturbed possession, and their office became a favorite meeting-place of the students. *Acta's* best period was from 1880 to 1883 or thereabouts, and during that period it afforded an admirably vivacious expression of Columbia life and spirit. *Acta's* articles had considerable literary merit, particularly the verse, which was widely quoted. Among the editors and contributors were: Harry Thurston Peck, John Kendrick Bangs, William Ordway Partridge, Frank Dempster Sherman, Nicholas Murray Butler, and John B. Pine, besides many other prominent Professors, University officers, and men of letters.

Spectator was started as a fortnightly by two former editors of *Acta* — Mr. Frederic W. Holls, class of '78, and Mr. H. G. Paine, class of '80. *Spectator* was primarily a newspaper, but early developed an artistic side in its cartoons and society sketches in the manner of George du Maurier. The best of the pictures were collected in 1882 into a book entitled *College Cuts*, which was dedicated to Du Maurier, and which ran through two editions. In 1885 *Spectator* absorbed *Acta* and took its motto — "*A Studentibus Studentibusque.*" Since then it has had two transitory rivals as a Columbia newspaper: *Blue and White*, 1891, and *Columbia News*, 1891 to 1893. Until 1892, when the *Literary Monthly* was founded, it was the literary publication of the students as well. When crowded out of the field of letters by a true magazine, it became more decidedly a newspaper, thus fulfilling

1898 the aims of its founders. In the spring of 1898 *Spectator* became a weekly and one year later a semi-weekly. At the same time with this last change the publication abandoned its blue-and-white covers and took on the modern newspaper form. In 1902 it became a daily paper, and succeeded, in a short time, in installing its own printing press in the basement of the old building styled "College Hall." It has a large clientele, as a thousand or more students now lodge in neighboring houses and live near the grounds, that promises to become larger with the erection of college dormitories, the coming year, on the newly acquired "South Field."

There are three active undergraduate literary societies: Société Française, Deutscher Verein, and King's Crown. Société Française, founded in 1897, holds during the season fortnightly meetings, at which French only is spoken, and presents, from time to time, a French play at the College. Deutscher Verein, founded in 1898, has a large active membership, cultivates the German Language and German University customs, and occasionally gives receptions to distinguished German visitors. In the spring of 1904 it gave on the College grounds a Kommers to the German Minister, Baron Speck von Sternburg, his suite, and invited guests. King's Crown, founded in 1898, has a large membership from the three upper college classes. It aims not only at coöperation with the English literature courses, but at being a great undergraduate club as well. It holds two meetings every month during the academic year. The first of these is a purely society meeting, at which are discussed literary subjects and topics of present College interest; the second is an open meeting, to which the other undergraduate societies are usually invited, and which is addressed in an informal way by some gentleman of literary repute invited for the purpose. The list of such speakers contains some of the most prominent names in contemporary American letters. After the address

HARTLEY HALL
Erected 1904

1869 there is a social meeting, with a modest collation, impromptu speeches, and the hearty singing of college songs. This society has general management of the "'Varsity Show" — a dramatic and musical entertainment, which consists of a play composed and performed by students, and constitutes one of the chief undergraduate events of the college year.

An associate of the late George William Curtis in the work of Civil Service Reform established at Columbia a fund from the income of which two medals, called "Curtis Medals," one of gold and one of silver, are annually awarded to College students for excellence in the delivery of English orations. The general conduct of the public competition for these medals, first awarded in the spring of 1904, was committed to King's Crown. The society hopes and expects to make of it a social affair of moment, recalling in this way the "Semi-annual Exhibitions" of student oratory that played so important and agreeable a part in the undergraduate life of the late fifties and many subsequent years.

The fraternity system has grown apace. In addition to chapters of Alpha Delta Phi, Psi Upsilon, Delta Phi, and Delta Psi, before mentioned, chapters of a dozen or more others[1] have been formed. Several of the Fraternities own or rent houses in the neighborhood of the College, in which members reside. A chapter of Phi Beta Kappa, the scholarship society of the college world, was established in Columbia in 1869. It has a vigorous existence. The annual meeting of the Columbia Chapter is held during Commencement Week. Members and officers are then elected, an address is delivered, and a dinner is served.

Among other interesting and useful student organizations are the Glee and Mandolin Clubs; the Philharmonic Society; the Society of Nacoms, a senior society, which aims to foster a high college spirit and a hearty college

[1] See Appendix D.

life ; the Churchman's Association, and the Young Men's 1901
Christian Association. The last named, after some years of desuetude, was revived in 1894. It has general charge of Earl Hall, a building erected in 1901 through the generosity of the late William E. Dodge that "religion may go hand in hand with learning, and character grow with knowledge," holds meetings and sociables throughout the year, maintains relations with the Students Club of New York, sends delegates to the "Northfield Conference," and concerns itself with meeting newly arrived students, aiding them in getting suitable living places and making them feel at home and among friends.

Before the removal of the College from 49th Street, Commencement was a matter of attraction and interest to but a limited number of alumni, and it had gradually come about that the graduating class had but little to do except to exhibit themselves and receive their degrees. A very salutary change has taken place and the whole affair has become more enjoyable and important. On Sunday of Commencement Week there is, in the Gymnasium, a baccalaureate sermon by a distinguished preacher, with fine vocal and instrumental music, and an attendance of some two thousand persons including the graduating classes and the faculties. On Monday, the seniors have a Class Day which, so far as the budding graduates are concerned, largely replaces the old-time Commencement. The elections to Phi Beta Kappa are announced, chosen orators, poets, and prophets discourse on the past, present, and future of the class and its members, the class yew tree is planted on the green with much ceremony, and the class song is sung. In the evening there is a ball given in the Gymnasium by the graduating class, the grove is illuminated, and "joy is unconfined." And, further, the spacious and beautiful grounds at Morningside Heights, the fine buildings, the nearness to the Hudson River and the "Edwin Gould" Boat-House, the great open spaces, the

1904 remoteness from the busier parts of the town, and the air of academic seclusion, attract to the College for Commencement Day a large and annually increasing number of alumni who set apart the whole day for the purpose. After the formal exercises, a luncheon is served in Alumni Memorial Hall, at which brief speeches are made by recipients of honorary degrees and the President of the University. After the lunch, during the rest of the afternoon and the evening, class reunions and College gatherings are held. It goes without saying that this radical change conduces greatly to the welfare of the College by drawing closer the bonds of association of the alumni with each other and with their common *Alma Mater*.

Two societies of alumni have benefited by the heightened interest in College matters occasioned by the new and improved environment — the Association of the Alumni of Columbia College and the Columbia University Club.

The Alumni Association had a fitful existence for many years till 1860, since which time it has had regular meetings and has been continuously active in promoting the welfare of the College. For thirty years the Association, by social and business meetings, by discussion, and by reports of its Standing Committee, made the alumni and others familiar with the doings of the College, its course of study and the changes therein, the character and efficiency of the instruction and discipline, its financial condition and needs, the educational advantages that it offered, and the improvements that were desirable and feasible; and, during those years and since, has had much to do with effecting and maintaining the relations of frank confidence that exist between the College and the public, and with enhancing the affectionate loyalty to Columbia of her sons.

The Columbia University Club has grown up within three years. In August, 1901, about two hundred alumni organized the Club, and, in the following month, had it

incorporated. It now has a membership of over eight 1904
hundred, which is steadily increasing, and has, on lease for a term of years, a beautiful, commodious, and well-equipped club-house overlooking Madison Square. It provides rooms for meetings of alumni committees on college and university matters, has a growing library of Columbiana, maintains a good restaurant, provides dinners for class reunions, enters heartily into the life of the undergraduates by encouraging them and aiding them in their various local and intercollegiate enterprises, and has become a centre of generous activity and wholesome influence in the affairs of Columbia.

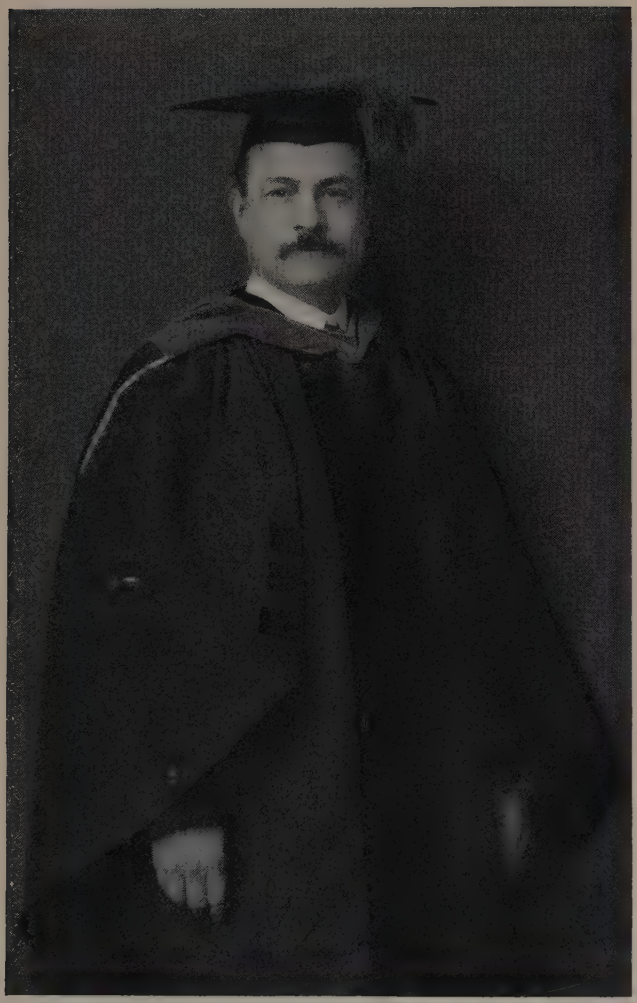
CHAPTER XV

1902–

PRESIDENT BUTLER

On the sixth day of January, 1902, Nicholas Murray Butler, Ph.D., LL.D., of the class of '82, a man of high repute and authority in educational matters, in this country and abroad, Professor of Philosophy and Education, Dean of the Faculty of Philosophy, Acting President of Columbia, was unanimously elected President of the University and a Trustee of the Corporation. The ceremonies attendant upon his formal installation as President were held in the University Gymnasium on Morningside Heights on the afternoon of Saturday, April 19, in accordance with the following programme: —

Prayers by the Rev. Dr. Marvin R. Vincent; Address on behalf of the Trustees by William C. Schermerhorn, Esq., Chairman of the Board; Presentation of the Charter and Keys of the University, and Installation of the President; Response by the President; Address on behalf of the Faculties by Professor J. H. Van Amringe, Dean of the College; Address on behalf of the Alumni by R. Fulton Cutting, Esq., class of '71; Address on behalf of the Students by Allan Beach Arnold Bradley, President of the senior class; Addresses by President Eliot of Harvard University; President Hadley, of Yale University; President Patton, of Princeton University; President Harper, of the University of Chicago; Dr. W. T. Harris, United States Commissioner of Education; Inaugural Address by the President; Hymn: "My Country, 'T is of Thee;" Benediction by the Right Rev. Dr. Henry C. Potter, Bishop of New York.



NICHOLAS MURRAY BUTLER,
PH.D. (COLUMBIA), LL.D. (YALE AND ELSEWHERE)
President since 1902

Of the numerous accounts given in the papers of the day, 1902
the following are from New York papers of April 20 : —

From the *Tribune* : —

"The prestige of a great educational institution was recognized on Morningside Heights yesterday afternoon when Dr. Nicholas Murray Butler was installed as the new President of Columbia University. Decorous pageantry, graceful oratory, and the presence of a great company of prominent people helped to make the importance of Columbia as a seat of learning more conspicuous. The President of the United States, a personal friend of Dr. Butler, was an honored guest at the installation. The Governor of the state of New York, the Mayor of the city of New York, other high public officials, presidents of many American universities and colleges, and men of prominence walked in the procession and listened to the addresses. Enthusiasm over the ceremonies was increased by perfect weather. The sunshine that flooded the campus seemed to pervade the great assemblage. Thousands of New Yorkers, who were uninvited and were kept back from the grounds of the university, formed crowds and watched the parade at a distance. Throughout the ceremonial there was manifested the warmest interest in the institution."

From the *Times* : —

"In the presence of the President of the United States and of an academic company such as has seldom before gathered together in this country, Doctor Nicholas Murray Butler was yesterday afternoon formally installed as the President of Columbia University to succeed Seth Low, who resigned to become Mayor of this city. The occasion was pointed out as unique in many respects. It was remarkable from the fact that it was one of the few occasions in the history of the country upon which the President of the nation has been the guest of honor and listened for nearly three hours to speechmaking, while he himself was not called upon to utter a word. President Roosevelt manifested his thorough enjoyment of the exercises, however, by his applause, his attention, his laughter, and, upon one occasion, his very decided gesture

1902 of delight. The occasion was unique in the fact that it marked the coming together upon the platform of a university of the President of the United States, the Governor of the State, and the Mayor of this city — and all of them former students of that institution. President Roosevelt is a graduate of Harvard, but he studied law at Columbia. It was the first time, also, since the first year of Washington's administration, that a President of the United States has paid an official visit to Columbia University."

"As an academic pageant, those who witnessed yesterday the installation of President Butler are ready to bear witness that New York has never offered anything approaching to it. The weather was all that could be hoped for, and much more than could be reasonably expected on the 19th of April. Though the hall in which the exercises took place is provisional and to be superseded in due time by the University Theatre for such purposes as it served yesterday, it is by no means an unimpressive or an undignified interior. It is ample in dimensions, not, of course, to accommodate all who desired to see the installation, but to hold all that it can accommodate, and, it may be added, to accommodate all that it will hold. Tickets were issued for no more than the place would seat with convenience and dignity, and every guest could well see and hear all that went on. The same good judgment which presided over the issue of tickets was brought to bear on all details of the arrangement. Everything went off perfectly and punctually because everything had been carefully thought out beforehand. And the procession not only had those elements of intellectual interest which belong to every assemblage of the eminent and wise ; it was also very well worth looking at merely as a spectacle. This is hardly the occasion on which to review the speeches of the installation, of which naturally the most important and inviting was that in which the new President made his educational profession of faith. But the spirit that breathed through all the speeches was that of congratulation and jubilation that the greatest city in the country had vindicated its claim to be regarded as the seat of one of the great universities of the country."

The Installation Dinner given by the alumni to President Butler took place at Sherry's on the evening of the

day of his induction into office, and was attended by 1902
over five hundred persons, including many distinguished guests.

The walls of the dining room were draped from ceiling to floor on all sides of the room with the white-and-blue colors of the University. A broad band of blue extended from end to end of each table, on which were quantities of white flowers. The menus were printed on rough-edged paper of the same colors. At the head of the room over the dais was the flag of blue and white bearing the seal of the University and on each side of it were American flags ; and around the room, on walls and on pillars, were the flags of other American universities, California, Chicago, Harvard, Johns Hopkins, Michigan, Princeton, Tulane, Virginia, Wisconsin, Yale, and others.

Every class from 1840 to 1901 was represented among the alumni present, and an impromptu glee club made up of the younger graduates led the singing.

Professor Van Amringe, of the class of '60, presided. Addresses were made by the President of the United States, the Mayor of the city of New York, Justice Willard Bartlett, of the Supreme Court of New York, Dr. Albert Shaw, Editor of the *Review of Reviews*, President Pritchett of the Massachusetts Institute of Technology, President Alderman of Tulane University of Louisiana, and President Butler.

The whole occasion, installation and banquet, was one of very great interest, and was characterized throughout by hearty enthusiasm for the new President and devoted loyalty on the part of the alumni to Columbia of which he had been made the honored chief.

Said President Patton, in his address, "I congratulate the Trustees of Columbia University on their choice of one for the presidency of this institution who has not only given abundant proof of his administrative ability,

1902 but has also placed the great army of educators in America under a lasting debt of obligation by his contributions to the study of some of the leading problems of education." "I consider it a good omen that the Trustees of this university have chosen a philosopher to fill the presidential chair. For be the facts what they may, which come under the notice of the student, it is the philosopher, the apostle of the idea, who is needed to make these dry bones live." "Your learning and your self-sacrificing enthusiasm," telegraphed President Draper of the University of Illinois, "have made you personally known to more people in the West than any other eastern leader in our American education." Commissioner Harris stated in his address: —

"For you, sir, who come to-day to succeed a long line of distinguished presidents in this venerable seat of learning, you have for many years made yourself a welcome member of the National Association of Teachers and aided its deliberations by your counsels. You have endeared yourself to its members by your frank and cordial fellowship. From the first you have associated yourself with that goodly number of leaders in higher education in our land who have realized how important it is to conduct even the most elementary education of the people in the light of the highest and best in human learning. You have labored for the enlightenment of the masses and you have seen that this enlightenment must come, not from a people's school which gives possession of a limited number of technical acquirements, skilled manipulation, and trained facilities, but rather from a school which opens to the minds of the children a vision of the far-off shining summits of human achievement in letters, and art, and in heroic service to humanity."

And President Alderman, in his felicitous speech at the dinner, said:

"Founders conceive, inaugurate, define — successors strengthen, administer, adjust, perpetuate. The great leaders who have wrought such wholesome change in the

conception of the American university, the amazing quarter 1902
of a century through which we have just passed, are still with us in the serene unfailing youth of men who think clearly, will resolutely, and work joyfully toward good ends. But the dawn is always searching for its heralds, and I salute your president and my friend, crowned with difficulty and with opportunity, as one of these heralds, as the wielder of one of the greatest forces in American life. I was, by chance, in a little city in northern Louisiana, when it was announced that Columbia had chosen her president. An earnest little woman came to me there, and said she was glad, because he had helped her in the kindergarten movement; a perplexed preacher said he was glad, because he had helped him in rational Sunday-school instructions; a school superintendent said he was glad, because he had helped him in his particular tasks. I knew very well that I had been strengthened by his counsel, and the whole unusual incident seemed to me to work the final definition of a college president as a man with much to give, with a passion for giving it, with a genius of sympathy and insight into the educational process as one whole thing from primary school to university."

President Butler has been so long connected with the College as student and officer, and was so largely influential in the re-formation and improvements which have been brought about, that no material change in general policy has yet been made. He has suggested important modifications of the curriculum and had them long and earnestly discussed by the faculty; he has reconstituted, in a measure, the teaching staff, advancing many of the younger officers and adding some distinguished names to the several faculties; he has manifested his hearty sympathy with the students, not only in their strictly academic labors, but also in all the extracurricular activities that play so important a part in the formation of sterling character aimed at by a collegiate education. During the three years since he became acting President, the gifts in money to Columbia have exceeded $3,000,000

1903 and there have been added to the four blocks occupied by the University the two city blocks immediately south of them, known as "South Field," on a portion of which the corner-stones of "Hartley Hall," a college dormitory, for which the sum of $350,000 was given by Marcellus Hartley Dodge, of the class of 1903, and his aunt, Mrs. Helen Hartley Jenkins, and a second dormitory to be erected by the Trustees, are to be laid on October 31, 1904, the one hundred and fiftieth anniversary of the founding of the College.

He has set himself, *more suo*, with promptitude and clearness of vision, to solve three great and pressing problems: —

The financial problem — "Columbia University, as now organized and equipped, may be likened to a giant in bonds. Strength, power, zeal for service are all at hand, but the bonds of insufficient funds hold them in on every side. In plainest language, Columbia University in 1902 is without adequate grounds and buildings and without sufficient income to care properly for the work that has already been undertaken, even if not a single extension of the work now in progress be planned. Columbia College, in which 492 undergraduates have been enrolled in 1901–1902, is without any building whatever for academic purposes, and the instructors and students are temporarily assigned to most unsuitable and inadequate quarters." The administrative problem — "In almost every case the university administration of to-day is merely an expansion of the methods and the machinery characteristic of the administration of the small colleges of yesterday out of which the universities have grown. Administrative work has been done by teachers in active service, and either as deans or as members of important committees they have divided their time between their books and laboratories and their classes on the one hand and their office duties on the other." "The wisest tendency in administrative development is, I am sure, to relieve teachers and investigators from every unnecessary demand upon their time and strength." The educational problem —

THE LIBRARY, EARL HALL, AND SOUTH COURT

Installation of President Butler, April 19, 1902

"Not a few matters of importance have been definitely 1903
settled at Columbia during the past twenty years, and settled, I believe, in almost every case, with wisdom and in accordance with sound principle. For example, it is settled policy at Columbia (1) that the requirements for admission to the freshman class of Columbia College shall not be raised beyond the point where they can be met by the student who has had a normal secondary school course of four years; (2) that these requirements, and those for admission to the Schools of Applied Science, the College of Physicians and Surgeons, Barnard College, and Teachers College as well, shall be stated in terms of the definitions formulated by the representative organizations of teachers of the several subjects, and administered, in coöperation with other colleges and with secondary schools, through the College Entrance Examination Board; (3) that a just balance shall be maintained between prescribed and elective studies in the undergraduate course, the student being in every case guided or supervised in his selection of subjects; (4) that Columbia College shall offer but a single degree, that of Bachelor of Arts, and that that degree shall represent the elements of a liberal education as it is conceived and defined by the Faculty of Columbia College; (5) that the several technical and professional schools shall rest upon a college course (though not necessarily one four years in length) as a foundation, either at once — as in the case of the School of Law — or as soon as practicable — as in the case of the Schools of Applied Science and of Medicine; and (6) that all possible means shall be taken to shorten the time in which a college degree and a professional or technical degree may be taken, by cooperation between the Faculty of Columbia College and the Faculties of Law, Medicine, Applied Science, and Teachers College.

"Significant as these matters are, and seriously as they affect the relations of Columbia University to the public welfare, there are still others which claim attention and which yield to none in importance. Of these I may mention at this time five: The maintenance of educational efficiency; the promotion of research; the better organization of the teaching of the natural sciences; the development of the social side of academic life through the provision of dormitory accommodations for students; and

1903 the length of the College course and the relation of that course to the rest of the work of the University."[1]

The "College, which is the oldest part of Columbia University, and in a sense the mother of all the rest," is sure of the President's sympathetic interest and cordial support: —

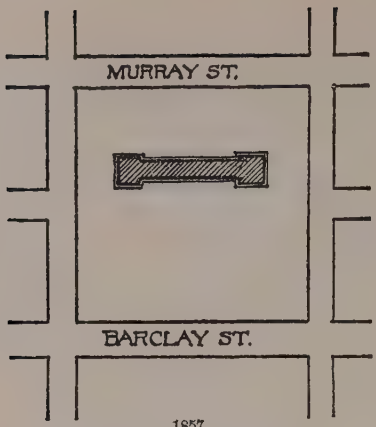
"The college, as we have it, is peculiar to our national system of education, and is perhaps its strongest, as it certainly is its most characteristic, feature. It breaks the sharp transition which is so noticeable in Europe between the close surveillance and prescribed order of the secondary school and the absolute freedom of the University. Its course of liberal study comes just at the time in the student's life to do him most good, to open and inform his intelligence, and to refine and strengthen his character. Its student life, social opportunities, and athletic sports are all additional elements of usefulness and of strength. It has endeared itself to three or four generations of the flower of our American youth, and it is more useful to-day than at any earlier time. I am anxious to have it preserved as part of our educational system and so adjusted to the social and educational conditions which surround us that a college training may be an essential part of the higher education of an American whether he is destined to a professional career or to a business occupation." "I find myself in hearty agreement with the recently expressed opinion of President Jordan of Stanford University that 'in the long run, the greatest University will be the one that devotes the most care to its undergraduates,' and for that reason I believe that too much care and attention cannot be given to the students in Columbia College."[2]

The alumni of Columbia College hope, therefore, and expect that their *alma mater*, dedicated one hundred and fifty years ago to the instruction of youth in the learned languages and in the liberal arts and sciences, to the promotion of religion and learning, will steadily advance in

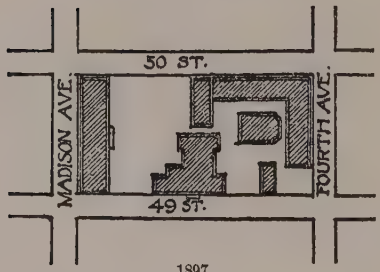
[1] President Butler's Annual Report, 1902. [2] *Ibid.*

dignity, usefulness, and power, ever striving to realize the 1903
ideal eloquently expressed by President Butler in his inaugural address : " It keeps step with the march of progress, widens its sympathies with growing knowledge, and among a democratic people seeks only to instruct, to uplift, and to serve, in order that the cause of religion and learning and of human freedom and opportunity may be continually advanced from century to century and from age to age."

J. H. Van Amringe.



1857



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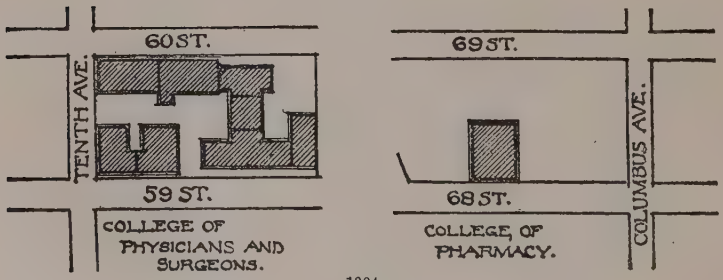
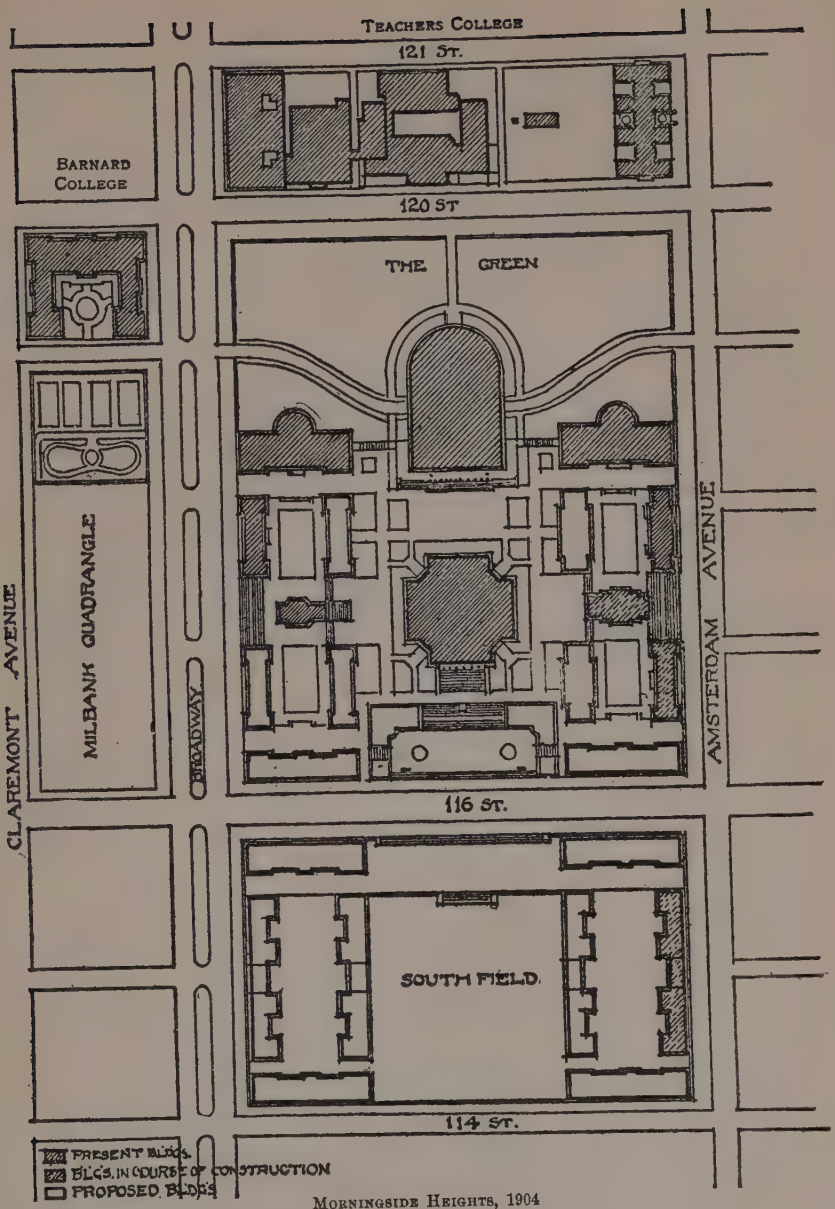


1904

PLAN OF BUILDINGS AND GROUNDS

Scale : 1 inch = 320 feet



MORNINGSIDE HEIGHTS, 1904

PLAN OF BUILDINGS AND GROUNDS

Scale: 1 inch = 320 feet

BOOK TWO

THE UNIVERSITY AND NON-PROFESSIONAL GRADUATE SCHOOLS

CHAPTER I

THE DEVELOPMENT OF THE UNIVERSITY

When we speak to-day of universities in the United States, we use the term in a somewhat novel sense, for the American universities are not precisely analogous to those of England or of France or of Germany. The American university may include more than one college of the English type, but it is not, like the English university, primarily a collection of colleges. The American university includes and administers a number of separate schools, collegiate, professional, and technological, and these are more or less independent in their organization and activity; but it is not, like the French university, merely a name for the central direction and control of these educational units. The American university, finally, may have all, and always has some, of the traditional university faculties of continental Europe — theology, law, medicine, and philosophy; but these are not yet generally correlated, as in Germany, either with the collegiate course or with one another. Moreover the American university, which in most cases has grown up about a collegiate nucleus, retains the college. It has not, like the German university, abandoned to the preparatory school or gymnasium all the disciplinary years of general education. It is also more catholic in its

1904 readiness to recognize new professions and to organize new professional faculties. To the American mind it has not seemed reasonable to exclude from the university the applied sciences of agriculture, forestry, metallurgy, industrial chemistry, and the higher branches of engineering, nor to refuse academic recognition to pharmacy or dentistry or veterinary medicine. The American university has been not only willing but eager to organize or annex new professional schools as fast as new vocations have approached the scientific level; it already includes schools to train schoolmasters and journalists. It is attempting to develop a faculty of the fine arts, which shall embrace music, painting, and sculpture; and it is considering, not whether architecture shall be included among university studies, but whether it shall be treated as a branch of engineering, or as an art, or as a peculiar combination of art and applied science. In many, perhaps in most instances, the American university is still rather an aggregation than a symmetrically articulated organization; but some of the leading universities are becoming educational as well as administrative unities.

So numerous are the institutions in the United States which have added to collegiate training some of these varied educational activities; so much do they vary in the range of their efforts and in the size of their teaching forces and student bodies; so different, under the unchecked play of individual initiative, are the forms of organization thus far developed and the degrees of correlation thus far attained, that no two experts would be likely to give the same answer to the questions: what are the essential elements of the American university? and which of the existing institutions are really entitled to bear the name? Still less agreement would probably be discovered if it were inquired: which are at present the leading American universities? And yet certain points of agreement are emerging. The American university should have at least three

of the traditional European faculties, and among these 1904
three should be a faculty of philosophy — or, as we have styled it and continue with increasing inaccuracy to style it, a non-professional graduate school. The American university should also be sufficiently American to include training in some of the newer professions, particularly in the chief branches of engineering. Above all, the American university must not only cherish and transmit knowledge; it must also help to increase knowledge and to extend its applications. Among the institutions that fulfil these conditions, the leading universities are those which have the largest bodies of teachers who are also investigators, and which attract, not by the maintenance of low standards and the bestowal of easy degrees but by the educational opportunities they offer and the scientific prestige they have attained, the largest number of students. A comparison based on these assumptions will show that at the present time (1904) there are in the United States nearly a dozen institutions that may fairly be regarded as universities, and that from every point of view Columbia has become one of the two leading universities of the country. It has, at the present time, the largest teaching force. It has the largest body of students, if college undergraduates are excluded from the count; the second largest body of students, if college undergraduates are included.[1] It is second to no other American (or English) university in the encouragement of research or in literary and scientific production.

The development of American universities has taken place, in the main, during the past half century. The leading universities of the East have been formed by gradual accretion about the nuclei of older colleges. Of these

[1] Cf. "The Columbia University of To-day," *The Independent*, April 17, 1902; reprinted in the *Columbia University Quarterly*, June, 1902, vol. iv, p. 245. When this article was written, Columbia ranked second in the size of its teaching force. In 1903 it took the first place.

1904 Columbia was almost the last, not indeed to attempt, but to achieve the beginnings of university development. During its first century of existence no effort to widen its activities had been permanently successful. In its hundred and fourth year it was still a small college, with only a dozen instructors and about one hundred and fifty students. During its fifth quarter of a century it gained three professional schools: two of its own creation, the Schools of Law and of Mines, the third by a treaty of alliance with the College of Physicians and Surgeons. All these throve and grew strong. Within the School of Mines there developed other schools of applied science. Law and science, however, were unrelated to the College or to one another, and the union with the College of Physicians and Surgeons was merely nominal. At the close of this second period Columbia was hardly a university; it was an interesting and promising aggregation of nearly a hundred instructors and fourteen hundred students.

In its sixth quarter of a century (1880–1904), Columbia established three graduate schools of non-professional instruction and research; put its Law School on a graduate basis, and lengthened the law course to three years; brought its School of Medicine into real union with the rest of the University, raised the standard of admission here also, and extended the medical course to four years; increased by further specialization of courses the number of its schools of applied science; added to them a School of Architecture, separated it from them and placed it with music in an inchoate faculty of fine arts; established such relations of reciprocity with the principal theological seminaries of New York City as to make these institutions, as far as the free movement of students is concerned, portions of its educational system; gained, by treaties of affiliation, a second undergraduate college, for women, and an additional professional school, for the training of teachers; and developed a large summer

school. In its one hundred and fiftieth year the University (a title first assumed in 1896) had a teaching force of 455 and a resident student body of 4709. 1904

During this period of expansion Columbia has extended its connections and its influence to a degree which mere figures of registration in no wise indicate. It has organized through Teachers College a promising system of university (or more properly of collegiate) extension teaching. It has established such relations with the Museum of Natural History, with the New York Botanical Garden, and with the Metropolitan Art Museum, as to make all the treasures of these institutions available for its own students of the natural sciences and of the fine arts; and such relations with the public and private charities of New York as to give to its students of social science abundant practical training, and to open to them limitless fields of research. To these and other public and benevolent institutions the University contributes in return expert counsel and assistance; and it coöperates with them in scientific investigation, popular education, and furtherance of the general welfare. At the end of its hundred and fiftieth year the University is in closer touch than ever before with the intellectual, artistic, and ethical life of the metropolis. At the same time, by the widening area from which its students are drawn, by the increasing number of its graduates who hold teaching positions in the schools, colleges, and universities of every section of the United States, and by its increasing contributions to scientific literature, it has become, as never before, a national force and a factor in the intellectual life of the world.

Why was this development, which of recent years has been so rapid, so late in its beginning and so slow in its early progress? The current theory, that the earlier administration of Columbia was unprogressive, is as incorrect as is the common impression on which this theory is based, that Columbia was from the outset a rich college,

1904 It is easy to contradict misstatements, but it is hard to correct false impressions. Twenty-two years ago, in his report of 1882, President Barnard showed that, even as a college, Columbia had not been financially prosperous until 1867. In the early years of the nineteenth century the income from its property was about $14,000. To keep the College running, its Trustees were repeatedly obliged to borrow money. In 1857 the College debt amounted to $166,000, and the net income from its property (interest and other charges deducted) was only $23,000. The debt was not extinguished until 1872. In 1882, as President Barnard pointed out, Columbia was a well-to-do college, indeed, but a poor university. At that time it had already engaged in university enterprises which soon required new borrowings. Nor has Columbia ever received adequate assistance from private benefactions. Until the closing decade of the nineteenth century the sum total of gifts and bequests to the College was absurdly small. New York took little interest in its old College because that College did not grow rapidly; and the growth of the University was arrested because the College did not gain the active sympathies of New York.

That the authorities of Columbia have at all times been solicitous for its advancement, that they have repeatedly striven, not merely according to their means but beyond their means, to widen the scope and raise the plane of its teaching, is made abundantly clear by the records of the old College. If it were only to demonstrate this fact, it would be worth while to trace the history of the university idea at Columbia, through its failures as well as its successes. The story, however, is worth the telling for its own sake.[1]

[1] For the earlier history of the university idea, the writer has relied chiefly on Professor Van Amringe's "History of Columbia University," published in *Universities and their Sons*. For the entire collegiate period (1754–1857) fuller data than can here be given will be found above, in the same author's history of Columbia College.

Collegiate Period (1754–1857)

I. *Efforts to widen the range of college instruction.* — Noteworthy at the outset is the prospectus composed by President Samuel Johnson, and published June 3, 1754. It included not only the ordinary subjects of the contemporary English college course, the ancient languages, logic, rhetoric, and mathematics, but also "surveying and navigation . . . geography and history . . . husbandry, commerce, and government, and . . . the knowledge of all nature . . . and of everything useful for the comfort, convenience, and elegance of life in the chief manufactures. . . ." This was to claim for the new College the entire field of the technological and of the non-professional graduate schools of the modern university. It goes without saying that the greater part of this field remained untilled. The revised curriculum of 1763 was substantially a copy of that of Queen's College, Oxford. From the beginning, however, and through the first century of Columbia's existence, more attention was devoted to the natural sciences than was customary, at so early a period, in the English and American colleges; and Columbia was apparently the first of American colleges to provide systematic instruction in political economy. The first special professorship that was created (1757) was that of "mathematics and natural history." The second (1762) was that of moral philosophy; and in 1818 the fifth occupant of this chair, Professor John McVickar, was charged also with instruction in political economy. In his masterly review of the history of Columbia, published in his report of 1886, President Barnard indeed declared that during the first century of the College, the instruction in physics and chemistry was elementary, and that "natural history," while it figured in the prospectus, was "taught hardly more than in name." Here, however, as in other

1754–1857

1754–1857 matters, it was not good-will but money that was lacking. In 1830 the Trustees established a "scientific and literary course," parallel to the classical course. At the same time they determined to establish sixteen public lectureships, with a range of topics extending over the fields of literature, philosophy, natural science, pure and applied, and the political sciences. The lectures were to be opened not only to matriculated students but to the public, on payment of a small fee for each course. The lectureships, however, were apparently to be maintained by the fees received from students, and few of them were even temporarily filled. In 1843 the literary and scientific course, which in its thirteen years had attracted but forty-nine students, was discontinued.

II. *Efforts to develop professional education.* — For professional instruction in theology, medicine, and law the Governors of King's and the Trustees of Columbia College were from the beginning anxious to provide suitable opportunities. In the additional charter of 1755, provision was made for a professorship of divinity, the incumbent of this chair to be appointed, from time to time, by the ministers, elders, and deacons of the Reformed Protestant Dutch Church in the city of New York. No appointment was ever made. In 1763 the Governors of King's voted to establish a department of medical instruction "as soon as their funds will enable them to do so." In 1767 a Medical School was established with a Faculty of six professors, and in 1769 medical degrees "in course" were conferred upon two students. This was not the first medical school in America; that established in Philadelphia antedated it by five years; but it was the first connected with a college, and it was the first to give degrees in course. Its activity, like that of the College, was interrupted by the Revolution. When the College was reorganized under the name of Columbia, in 1784, the Regents of the University of the State of New York, to

whom its government was committed, determined to establish four faculties; viz., Arts, Medicine, Law, and Divinity. The latter was to consist of such professorships as might be established by the different religious societies within the state. The law faculty was to be composed, at the outset, of three professors. Neither of these faculties came into existence. The Medical Faculty, however, was reëstablished as well as the Faculty of Arts; and when, in 1787, Columbia College was placed under the control of its own Trustees, the Medical School was carried on, as before the Revolution, as a part of the College. In 1792 it was reorganized, but in 1813 it was discontinued, its Faculty being absorbed by the independent College of Physicians and Surgeons, established in 1807. During its nominal existence of forty-six years and actual existence of thirty-eight years, the King's-Columbia School of Medicine graduated thirty-five doctors. 1754–1857

As early as 1773 the Governors of King's created a professorship of natural law. The natural law theories prevalent at the time were decidedly revolutionary; but the occupant of this chair, the Rev. John Vardill, was a Tory. It is not clear that he ever assumed the duties of his professorship; and it was discontinued in 1776. In 1792, the legislature having granted to Columbia College an annual subsidy for a term of years for salaries of new professors, the Trustees decided that among others a professorship of law should be established; and in 1793 James Kent was appointed to this chair. In 1798 he resigned, and, as the legislative grant was not renewed, the professorship was discontinued. In 1823, however, Kent again became professor of law, and although in the later years of his life he delivered no lectures, he retained the chair until his death in 1847. His "Commentaries," published 1826–1830, were the outcome of his professional activity. In 1848 William Betts was appointed professor of law. In 1854 he resigned and the professorship was

1754–1857 again discontinued. At the close of Columbia's first century there was, accordingly, no provision for professional education.

III. *Efforts towards university organization.* — The plan of 1784, by which Columbia College was to be the nucleus of a state university, with all the four traditional faculties, has been already noticed. As this programme was formulated by the State Regents during their brief control of the reorganized Columbia, their action does not, of itself, furnish any indication of the ideals and aspirations of the College. The plan was, however, anticipated, and perhaps suggested, by proposals which emanated from the Governors of King's College ten years earlier. In the British archives[1] there still slumbers a proposed charter, establishing "The American University in the Province of New York." This charter was drafted by order of the Governors of King's College, was formally approved by them August 4, 1774; was forwarded by Lieutenant-Governor Cadwallader Colden to Governor William Tryon, then in England; and was by him submitted, February 17, 1775, to Earl Dartmouth, at that time principal secretary of state for the American department. Its chief provisions were that King's College should be "the mother of the American University"; that King's and all other colleges which should hereafter be erected within the province of New York should be members of a single university to be known as "The American University in the Province of New York"; that the government of the new University should be intrusted to a body of Regents; that this body should be constituted by adding to the existing Board of Governors of King's College a number of new honorary Regents resident in the mother country, and by empowering the Governors resident in America to add so many inhabitants of the province of New York or of neighboring provinces as should make the

[1] Colonial Papers: America and West Indies, vol. 185, folio 55.

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Acting President, 1867, 1889

Regents amount to the number of fifty, exclusive of the official Regents resident in Great Britain and Ireland. 1754–1857 The officers of the University were to be a chancellor and a vice-chancellor; King's College and each other college belonging to the University was to have a president and a vice-president. A sort of executive committee of twelve, to be styled the "Academical Senate," might be chosen by the Regents, and this Senate might be intrusted with the general control of university education and discipline. A "minor academical senate" might be created for the government of any of the colleges; it should consist of the President and the several fellows, professors, and tutors, and should exercise such powers as the Regents might grant it. The corporation was to send two representatives to the General Assembly of the province; and the electoral body by which such representatives were to be chosen was to be composed of the Regents, professors, fellows, and tutors of the University, and of the masters of arts and other holders of superior degrees.

The projected "American University" was clearly modelled on the English Universities; it was to be a university of colleges. With the development of colleges locally separated, it might have approached the French type of university. The only hint in the proposed charter of university expansion in our modern American sense is to be found in a clause empowering the new University to grant "all such degrees, as well in philosophy and in the municipal law of England as in all and every other art, science, and faculty whatsoever, as are or may be conferred by all or any of the universities in England or in Ireland."

The charter was considerately put in such form that to become immediately effective it needed only the royal signature and seal — and the filling in of two blank spaces. One, of three lines, was left open for such new professorships as the King might see fit to found; the other, of two pages, for such new endowments as he might

1858–1879 graciously grant. It was clear to the Governors of King's that the American University would require large resources, and the charter itself provided that it might hold land up to the yearly value of £5000!

Lieutenant-Governor Colden's letter declares that, in view of the existing control of education by dissenters, not only in New England but likewise in New Jersey and other colonies, it seems requisite "that a seminary on the principles of the Church of England be distinguished in America by particular privileges, not only on account of religion, but of good policy, to prevent the growth of republican principles, which already too much prevail in the colonies." Governor Tryon's letter states that "the attachment to his Majesty's person and government which has always distinguished the Governors, professors, and members of King's College renders them truly deserving of the royal attention and countenance."

The records[1] show that the King ordered, in April, 1775, that the proposed charter should be laid before him in Privy Council. Of its further history we know nothing, except that it was not signed. There were, at the time, more pressing American questions before his Majesty's government; and his advisers may well have deemed it inopportune to complicate the political situation in New York by rekindling sectarian controversy.

Development of Professional Schools (1858–1879)

The addition to the College between 1858 and 1864 of a number of flourishing professional schools was the result of a new and carefully considered effort to develop advanced non-professional instruction. The plan was in a sense a renewal of that of 1830; but it served in many respects as a model for the later and successful attempt of 1880–1892.

[1] Home Office: *Domestic Letter Books*, Vol. I, p. 195.

In October, 1852, on the motion of President King, a committee was appointed to consider and report, among other matters, upon "the expediency of engrafting upon the foundation of this College a scheme of university professorships and lectures in the higher departments of letters and science." Among other pending questions was that of the removal of the College from its old site; and in October, 1853, a committee of three was chosen by ballot to consider the question of removal, 1858–1879

"and, in the event of such removal, whether any and what changes ought to be made in the undergraduate course; and whether it would be expedient to establish a system of university education in addition to such undergraduate course, either in continuation thereof or otherwise."

The committee consisted of William Betts, Dr. Henry James Anderson, and the Hon. Hamilton Fish. A month later this committee presented a preliminary report. With regard to the establishment of university education,

"[they] were not prepared to say more than that they regarded it favorably in those respects in which it might be practicable, but that the design was not free from serious difficulties; that the subject had occupied the minds of learned men in connection with the English universities, but hitherto without effect; that the medical and theological schools had done much, perhaps all, that could at present be done in that direction; but in regard to higher jurisprudence and the sciences and their application much might possibly be done by the college."

A year later, on November 6, 1854, resolutions regarding a graduate course of study were presented by this committee, to which in the meantime the Rev. Dr. John Knox had been added; and on November 23 the following resolutions were independently proposed:

"*Resolved:* That in view of its greatly enlarged resources, the College ought now to establish supplemental courses in continu-

1858–1879 ation of the studies of the first three years, without reference to professional or artistic pursuits, but solely for higher culture in learning and science, to extend for three additional years, with degrees, as at present, at the end of the first or senior year, with an unrestricted choice of studies during the two succeeding years.

"*Resolved:* That the College, as soon as its means will permit, may advantageously establish special and separate professional and artistic schools in connection with the liberal arts and sciences to be taught in its general course."

On December 4, 1854, the consideration of both sets of resolutions was postponed "until the committee on the course shall report a statute." Meanwhile through another committee, appointed in 1855 "to inquire into the condition of the institution," a wide range of investigation was instituted, involving an examination of the President and all the professors in the College, and correspondence with eminent educators in all parts of the United States.[1] Among the latter was Francis Lieber, then professor of history, political economy, and philosophy in South Carolina College. The plan finally adopted coincided in many respects with his recommendations, but the main lines of that plan were apparently worked out before his views were elicited. The statute contemplated in the resolution of December 4, 1854, was reported March 2, 1857; considered in committee of the whole and amended May 11; and adopted July 6.

In view of later developments, it is interesting to note that the line between college and university work was drawn at the close of the junior year; up to that point there was to be a single prescribed course of study. The studies of the senior year were divided into three groups, — letters, science, and jurisprudence. For the further

[1] Report of a Committee of the Trustees of Columbia College appointed to inquire into the condition of the institution and to consider such measures as might be judged expedient to increase its efficiency and usefulness. Printed by order of the Trustees, New York, 1858.

prosecution of the special studies thus initiated, graduate schools were established, as follows: 1858–1879

"1. A school is established, called The School of Letters, in which shall be pursued the following studies: moral and mental philosophy, including an analysis of the moral and intellectual powers; æsthetics, or the principles of taste and art; the history of philosophy; appropriate literature of the Greeks and Romans; Oriental and modern languages, as far as possible; comparative philology; ethnology.

"2. A school is established, called The School of Science, in which shall be pursued the following studies: mechanics and physics; astronomy; chemistry and mineralogy; geology and palæontology; engineering; mining and metallurgy; arts of design; history of science; natural history; physical geography.

"3. A school is established, called The School of Jurisprudence, in which shall be pursued the following studies: history; political economy; political philosophy; the principles of natural and international law; civil and common law; the writings of the Greeks and Romans, and of the modern civilians and jurists, appropriate to the last three subjects.

"The conjunction of the above three schools shall form the University Course.

"Any person who may enter either of the said schools may receive the degree of master of arts, after having pursued for a space of time not less than two years, to the satisfaction of the Trustees and Faculty, such of the studies thereof, and under such regulations, as the Trustees may from time to time prescribe.

"There shall be fellowships, with or without stipends, to be filled by the Board of Trustees, upon such examination, and upon such rules and regulations as may hereafter be prescribed."

In a public address Mr. Betts, the chairman of the committee that prepared the statute, insisted upon the distinction between the work of the first three years of the College course, and that of the senior and graduate years. Up to the close of the junior year, he said, "the end in

1858–1879 view is mainly to discipline and invigorate the mind and to enlighten and purify the heart." From that period onward,

> "the object is to apply this intellectual light and vigor to the permanent acquisition of knowledge; to emancipate the student gradually from the trammels of catechetical teaching, and to prepare him for the higher and more arduous efforts of self-instruction. With this view, three departments are constructed, which are termed schools of letters, of science, and of jurisprudence. . . . On entering the senior year, each student may select either of these schools. . . .
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> "After graduation, the same schools are proposed to be continued for two years. A reference to the proposed course of instruction will show that they comprehend a large circle of human learning. The instruction in these schools is not to be confined to the graduates of the College. It is open to the whole world. A sufficient body of teachers is provided to commence the undertaking. A nucleus is presented for a great university, adapted and prepared to meet all the wants of the community. If there be really that demand for the acquisition of knowledge which has been supposed, it may here be satisfied. If there be in fact no such demand, or such only to a limited extent, time will soon develop the truth. It is indeed hoped that the graduates of the College, animated by a noble and inspiring love of learning, will not fail to take advantage of the proposed means of instruction thus afforded to them, and that others will gradually be drawn to join them.
>
> "The progress of the undertaking may be slow; it may be unsuccessful. The slowness of its progress need not, however, produce despair. Most things that are valuable and lasting are slow in progression. Time and experience will, however, soon demonstrate the utility of the attempt; and it is so devised, that it may be expanded, contracted, or discontinued without difficulty."

The "sufficient body of teachers" was provided in part by the appointment of six additional professors in the College and in part by procuring the assistance of special

lecturers. The practical organization of the new University courses was intrusted to a new committee, appointed March 8, 1858, which consisted of the Right Rev. Horatio Potter, William Betts, Samuel B. Ruggles, Gerrit G. Van Wagenen, and George F. Allen. By resolution of June 21, 1858, this committee was authorized to secure the services for a term not exceeding two years, of Professor James D. Dana (of Yale College), in the department of geology and natural history, of Professor Arnold Guyot (of the College of New Jersey) in physical geography, of Mr. George P. Marsh, in the English language, 1858–1879

"at a compensation to each not exceeding $1500 annually; and of Professor Theodore W. Dwight, or such other competent instructor as said committee may select, for the elementary branch of the law department, to be compensated by fees to be guaranteed by the College to amount to $1500 annually; and of any other instructors in any department of jurisprudence, science, or letters presented by the statute, who will accept fees in full compensation."

The services of all those gentlemen were secured, but, owing to ill health, Professor Dana was prevented from delivering his lectures on geology. Dr. Torrey of the College of Physicians and Surgeons was engaged to lecture on botany. Of the newly appointed professors, Francis Lieber undertook to lecture on history and political science; Charles Murray Nairne on philosophy and literature; Charles Davies and William Guy Peck on mathematics; Charles W. Hackley on astronomy, and Charles A. Joy on chemistry. With this force the University lectures were begun in the autumn of 1858. The lectures in the scientific courses were given in the College buildings at 49th Street; those in other subjects at the rooms of the Historical Society in Second Avenue near 11th Street.

Except in elementary law, these public lectures failed to secure such support as to justify their continuance. In

1858–1879 Professor Dwight, however, Columbia had secured the greatest legal instructor of the time; and his lectures proved so attractive that his engagement was made permanent. In 1864 he was made Warden of the Columbia Law School, a position which he retained until 1891. In establishing a department of law, in 1858, the Trustees had intended to make provision, primarily, for preparing students for admission to the bar; but it was also their intention to provide instruction in other and higher branches, not absolutely necessary to such admission. Their hope in this was that "if a large number of students be drawn into the school, it will probably not be difficult to induce them to attend the superadded studies and thereby acquire that more elevated learning which it is the object of the College to extend." In the early years of the school, Professor Lieber gave instruction in public law, Professor Nairne in the ethics of jurisprudence, Professor John Ordronaux in medical jurisprudence; and several eminent members of the bar, including William M. Evarts, were enlisted as lecturers on special topics. All the prescribed courses of instruction, however, were conducted for twenty years by Professor Dwight; and he made the school simply and solely an avenue to the bar. "Lieber's audience of students seldom rose above four members, and Nairne's was usually one. At last this one disappeared, and Nairne refused to try any longer, unless specially ordered by the Trustees. The order was never issued and the subject of ethics disappeared from the curriculum of the Law School."[1] Lieber died in 1872, and the instruction in public law fell into abeyance until the appointment of Professor Burgess, first as lecturer, in 1875, then as professor in 1876. The first result of the attempt to develop university instruction was thus the creation of a profes-

[1] Remarks by Professor John W. Burgess, in Committee of the University Council, February 24 and April 6, 1893, on the Degrees of Master of Arts and Doctor of Philosophy. Printed for the University, 1893.

sional law school, to which students were admitted without examination. 1858-1879

As regarded graduate instruction, the experiment of 1858 was wholly unsuccessful. The graduate schools of Letters, Science, and Jurisprudence never really came into existence. Accordingly in June, 1861, the Trustees resolved: "That the division of the senior class into three schools be abolished at the end of the present academic year, and that the course of study thereafter be the same for the whole class." In the same month the select committee on the graduate course was discharged at its own request. The plan failed, not because of intrinsic defects, but because it was put in operation at least two decades before the American public was ready for it.

The attempt to develop university instruction and the organization of a successful School of Law undoubtedly increased the prestige of the institution, and were probably of influence in disposing the College of Physicians and Surgeons to seek an alliance with Columbia. The proposition, which was presented to the Trustees of Columbia College, June 6, 1859, was for a nominal union merely. Each institution was to remain independent; but the College of Physicians and Surgeons was to be styled the Medical Department of Columbia College, and the two colleges were to unite in bestowing, upon the recommendation of the Medical Faculty, the degree of doctor of medicine. Conference committees were appointed; the report of the Columbia committee was favorable; and the alliance was consummated a year later, as soon as the College of Physicians and Surgeons had secured from the legislature of the state the necessary modification of its charter.

A third result of the experiment of 1858 was the establishment of still another professional school, the School of Mines. At the same meeting of the Trustees at which the overtures of the College of Physicians and Surgeons were presented, it was resolved: "That the committee on

1858–1879 postgraduate instruction report to this Board at its next meeting on the expediency of establishing a practical school of science." In the report of the committee of conference, in the same month, it was suggested that "by the establishment of a school of medicine, as now proposed, facilities will be afforded by the eminent abilities of several of the Faculty of the Medical College for forwarding the establishment of a practical school of science, as now contemplated by the Trustees of Columbia College." The Trustees were thus prepared to entertain favorably the proposition submitted by Thomas Egleston in March, 1863, to establish a school of mining engineering and metallurgy. The School of Mines was opened November 15, 1864, and its immediate success was beyond anticipation. The connection of this school in the minds of the Trustees with the statute of 1857 is made clear by their official utterances. The select committee appointed in April, 1863, to report upon the expediency of establishing such a school, recommended "that postgraduate or university professors of analytical chemistry, of mining and metallurgy, and of mineralogy and geology, and instructors in the French and German languages be appointed; such professors and instructors to be compensated wholly by fees." And in acknowledging a gift of minerals, in September 1864, the Trustees directed that the donor "be informed that arrangements are now in progress for establishing, as a portion of the postgraduate instruction in the College, a school of mines and metallurgy." The connection with the resolution of June, 1859, is shown in an official circular of the new school, in which its establishment is described as "a first step" towards "a school of applied science."

The prosperous history of these professional schools is narrated elsewhere in this volume. From the point of view of university organization it should be noted that not only was the independent Medical Department a

proprietary school, but, owing to the inadequate resources of Columbia College, the Schools of Law and of Mines were established on practically the same basis, the professors receiving no remuneration except from the fees of the students. Under such conditions the Columbia authorities could have no effective control over the conditions of admission or of graduation. The educational standard could not equitably be raised without compensating the professors for the prospective loss of income. In the case of the School of Mines this state of things was happily of brief duration. The Law School, however, remained on this basis until 1878, and the Medical School until its complete union with Columbia University in 1891. 1858–1879

During the following fifteen years (1865–1879) no new educational enterprises were attempted. The energies of the corporation were fully occupied in the task of providing the College and the School of Mines with suitable accommodations and equipment, so far as this was possible on the 49th Street site. The School of Law developed in Great Jones Street as independently as the College of Physicians and Surgeons in 23d Street.

During this period President Barnard kept constantly before the Trustees, the Faculties, and the public the ideal of university development. When the condition of the College at his installation in 1864 is considered, and when it is remembered how recently an ambitious plan of university development had failed of accomplishment, it is hard to rate too highly the prompt courage with which he adopted the university policy or the stubborn faith with which he predicted its ultimate triumph. In his inaugural address Dr. Barnard said:

"Our present beginnings may be the means of drawing to us such aid from those to whom the prosperity of this College is dear, or who would not willingly see the institutions of this magnificent city inferior to those of many minor towns, as may enable us to present, as time ad-

1858–1879 vances, all the various attractions to seekers after knowledge which are necessary to complete the full ideal of a university."

Two years later, in his second annual report (1866), he asserted that universities were already growing in America by gradual accretion around existing collegiate nuclei, and he declared:

"If anything is written in the book of destiny with a distinctness not to be mistaken, it is that our own College is to furnish a similar example. . . . [Columbia] is the nucleus of what will one day be the great university of the city — possibly of the continent."

In 1879 he wrote:

"Of the very great number of colleges in our country . . . few . . . are likely to become universities, and, fortunately, few universities are needed. It would not be difficult to point out at the present time a certain limited number of these institutions [which] . . . will be . . . among those few. Some are indicated by their actual present condition, some by their geographical situation, and some by these causes combined. Columbia College falls into this latter class."

And in 1883:

"America will yet have her universities, offering advantages equal to those of the most celebrated similar institutions in other lands — universities attractive enough not only to deter the graduates of our own colleges from seeking their supplementary education elsewhere, but even to attract aspirants after knowledge from abroad . . . Of these Columbia College must manifestly be one. Especially favored in point of situation, and possessed of an endowment sufficient to guarantee stability and to attract additional benefactions . . . its manifest destiny is to expand in usefulness and strength till it shall become the leading educational institution in the United States."

Such faith as this was a force; and such prophecies, repeated from time to time with growing assurance, contributed in no small measure to their own fulfilment. President Barnard, however, did much more than believe and prophesy: he zealously aided in the upbuilding of every department of instruction already in existence, and he indicated from year to year what new branches of instruction Columbia must introduce, what lines of research it must prosecute, what alliances with the scientific activities of the city and of the country it must form, in order to attain the stature and develop the spirit of a university. Every step that was taken during his presidency to widen the range of Columbia's work was previously urged by him; nearly every forward movement of the kind that has since been initiated, or is now contemplated, will be found suggested in one or another of his annual reports; and in these reports still other developments are foreshadowed that can hardly be said to be as yet in contemplation. 1858–1879

During the first fifteen years of Dr. Barnard's presidency, however, but one step was taken that demands notice in a review of university development. The provision of the statute of 1857, that "there shall be fellowships," was put in execution in a modest way, in 1871. Six fellowships in letters and in science were instituted, each of the annual value of $500, to be held for three years. Two of these were offered to each class graduating from the College. Until 1878 they were awarded upon special examinations; subsequently upon the nomination of the College Faculty. Until opportunities were developed at Columbia for advanced non-professional study, the holders of these fellowships were not only permitted but expected to study abroad. In 1890, when the present system of university fellowships was established, these College fellowships were discontinued. From 1872 to 1890 thirty-three awards were made. The chief re-

1880–1904

sult was to assist in providing the future University with properly trained professors; for while several of the Columbia fellows, including Washburn Hopkins, and Richard T. Ely, obtained chairs in other universities, not less than thirteen became professors at Columbia, and two of these, Professors Butler and Perry, successively guided as Deans the development of the Faculty of Philosophy.[1]

The only part of the University in which graduate work was prosecuted, even in a modest way, was the School of Mines. There, under a system of free tuition to graduates, a varying but never large number of students conducted investigations with little systematic direction. In 1880–1881, the year before the scheme of graduate instruction presently to be noted was put in force, the number had risen to sixteen; and prior to 1880, sixteen candidates had received the degree of doctor of philosophy on recommendation of the Faculty of Mines.

Graduate Schools and University Organization (1880–1904)

In 1878 we find the Trustees again occupied, if not with the development of graduate instruction, at least with the matter of graduate study. A resolution of May 6, 1878, declared:

"That after the annual commencement of June, 1880, the degree of master of arts in course shall not be conferred except upon bachelors of arts of this College of three years' standing or more, who shall have passed an approved examination upon studies to be prescribed by the Faculty. . . ."

The Faculty was more conservative than the Trustees. Resolutions adopted by it March 14, and approved by the Trustees, April 7, 1879, announced that the degree of

[1] For fuller details, see article by Professor J. K. Rees in the *Columbia University Bulletin*, December, 1894; no. ix, pp. 59–107.

master of arts would be conferred not only upon those graduates who successfully pursued a prescribed course of study, but also upon those who presented, in lieu of examination, a thesis or dissertation, or a degree conferred in course by a regularly incorporated school of theology, law, medicine, or science. 1880–1904

In 1879, in his annual report, President Barnard strongly urged that a new attempt should be made to provide graduate instruction. He declared that the need of such instruction was fully recognized, instancing the numbers of American college graduates studying in Europe, and the development of graduate courses at a few American colleges. He hazarded the prophecy that, in those American institutions which should make satisfactory provision for such advanced studies, the graduate instruction might, in time, "overshadow the undergraduate." "Our universities," he added, "will be formed by the expansion of the system of postgraduate instruction." On February 25, 1880, he presented to the Trustees' committee on the course a memorial on graduate instruction, and a plan for its immediate establishment in certain branches.

A few days earlier, on February 20, Professor John W. Burgess had submitted to the President a plan for the establishment of a university "department" of political science, with a course of instruction in history, public law, Roman and modern civil law, and political economy. This department was to be open to students who should have successfully completed the junior year of a college course, or who should pass equivalent examinations, including, in either case, a fair reading knowledge of the French and German languages. The fee for instruction was to be the same as in the undergraduate department of the College, and the studies of the first year were to be open to members of the senior class. All the courses were to be open to students in the School of Law without additional fees. On the successful completion of the first year, stu-

1880–1904 dents were to receive the degree of bachelor of arts; on completion of all the courses, and after successful examination therein, students were to receive the degrees of master of arts and doctor of philosophy; "and if in addition to the courses in this department the student shall have received the degree of bachelor of laws, either from the Law School of this University or from any other school of municipal law in good standing, the degree shall be that of doctor of civil law." The reasons assigned for establishing this department were to provide adequate training for the civil service of the government, and to develop all branches of the political sciences. "It is the bounden duty of a university, worthy the name, to teach all that has been gathered in the world's experience in this as well as in all other departments of superior knowledge, and to add continually thereto."

The antecedent history of this proposal was as follows. In 1875 Professor Burgess, then occupying the chair of history and political science at Amherst College, was invited to deliver a course of lectures upon public law at the Columbia Law School. In the following year he was called to Columbia as professor of history, political science, and international law, with a seat in the Faculty of the College as well as in the Law Faculty. In 1877 Richmond Mayo-Smith, who had studied at Amherst under Professor Burgess and subsequently for two years in Germany, was appointed tutor in history in the College; in 1878 he became adjunct professor of political economy and social science. In the College Professors Burgess and Mayo-Smith had free hand in organizing general historical instruction and elementary teaching in political economy. In the Law School Professor Burgess found it impossible to develop the department of public law or to introduce the study of foreign law and comparative jurisprudence. "In the year 1875," as Professor Burgess has since stated, "the Trustees resolved to . . . attempt to

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THE QUADRANGLE, LOOKING EAST

reintroduce [into the Law School] those branches of jurisprudence lost . . . by the death of Lieber and the withdrawal of Nairne. They resolved that the period of study in the Law School should be extended from two to three years, with the purpose that courses in political history, public law, and political science should form parts of the curriculum required for the attainment of the degree."[1] This change, however, was successfully opposed by Professor Dwight. In 1879 Professor Burgess was convinced that he had failed to realize the purpose for which he had been called to Columbia, namely "to neutralize the intense professionalism of the Law School by supplementing the studies in private law . . . with those studies in ethics, history, and public law necessary to complete the science of jurisprudence." 1880–1904

"I frankly told the Trustees my conviction. . . . I told them, however, that I was still unwilling to have any compulsion exercised . . . in regard to a reform of the law curriculum, and that I thought there was another way out of the difficulty. . . . I then laid before them the plan for the creation of a faculty of political science, which should teach all the branches of history, sociology, economics, public law, and comparative jurisprudence, and should be empowered to induce the law students to pursue these studies by the offer of [higher] degrees. . . . The purpose for which the School of Political Science was created [was] the education of the rulers of the country — for the lawyers are the rulers of the country — in those subjects which will properly prepare them for their highest work."[2]

President Barnard accepted the plan with much warmth, incorporating it with his own in his communication of February 25 to the committee on the course. He insisted particularly upon the consideration that such a course of study as Professor Burgess proposed would serve to pre-

[1] Remarks on the Degrees of Master of Arts and Doctor of Philosophy, cited above. [2] *Ibid.*

1880–1904 pare young men for governmental service. It should be remembered that at this time the movement for the reform of the federal civil service was achieving its first triumphs, and that the supporters of the competitive system looked forward to its rapid extension to all but the highest positions in the domestic and foreign service of the country. Professor Burgess himself said, in his letter to the President, that "the government . . . in its civil service reforms . . . has opened the way for an honorable career to the young men of the nation in the governmental service, which may be successfully pursued by the best intelligence, skill, and fidelity, offering itself without any reference to political influence or patronage." President Barnard further suggested that the proposed course of study would serve to fit young men "for the duties and responsibilities of public journalists"; and he proposed the establishment of a "school of preparation for the civil services, diplomacy, and the editorial profession." This was the first suggestion of a new "school," and it is the more surprising as it came in connection with the movement to establish a general system of graduate instruction. The explanation is that the graduate instruction proposed by the President was to be non-professional, while the course of study proposed by Professor Burgess seemed to the President to be professional. Possibly also the President judged that a graduate "school" would enjoy greater prestige, and would be more likely to attract graduates of other colleges, both from the Law School and from outside the University, than a mere "department" of the College; and if so, he judged rightly.

Besides proposing the establishment of a "school" instead of a "department," President Barnard suggested that the degree to be given at the end of the first year should be bachelor of philosophy, instead of bachelor of arts; and he did not support Professor Burgess's proposal that the degree of D.C.L. be given in course.

Further changes were made by the Trustees' committee on course, which consisted of the Rev. Morgan Dix, Dr. Cornelius R. Agnew, Stephen P. Nash, Gouverneur M. Ogden, and the President. This committee made its report May 3, 1880. Taking up first the President's plan of graduate instruction, it declared: 1880-1904

"The question of the desirability or importance of affording to young men opportunities for more advanced study than the necessarily narrow limits of the undergraduate course allow is one which . . . it is hardly necessary to argue. . . . With the Trustees of Columbia College the question has not been whether we should take part in the movement, but whether the time had arrived when we could do so with effect."

As regarded the proposed "school of preparation for the civil service," the committee said that it was hardly necessary to make training for the service of the government "a declared object, and to do so might awaken jealousies prejudicial to success."

"That the proposed system of training would in fact form an admirable preparation for the duties of office, or for the discharge of any public function, whether executive or legislative, can hardly be doubted; . . . but it is not to be assumed that as political affairs are now managed, the possession of superior qualifications will necessarily afford the aspirant to place any very substantial preliminary advantage."

The committee reported a plan of graduate instruction in ancient and modern languages and literatures, in mathematics, astronomy, physics, and chemistry, and in history and political economy; in all fifteen courses, occupying respectively from one to three hours per week. These courses were to be delivered in the main by members of the teaching force as previously constituted, no additional appointments being recommended except of three tutors and an instructor. Six other courses were to be offered,

1880–1904 "as soon as satisfactory arrangements can be made for the purpose."

The committee also reported a statute establishing a School of Political Science, "designed to prepare young men for the duties of public life." The school was to be conducted by Professors Burgess and Mayo-Smith with the assistance of two new lecturers. The conditions of admission and the course of study were those which Professor Burgess had proposed; the degrees to be awarded were those proposed by President Barnard, viz., Ph.B. and Ph.D. A point in which the committee departed from the plan proposed by Professor Burgess and endorsed by the President touched the relation of the new course of study to the undergraduate curriculum. Professor Burgess had proposed that the first year lectures in political science should be thrown open to seniors in the College. President Barnard had proposed a more liberal elective system in the College, which, if accepted, would have made Professor Burgess's plan feasible. The committee was unwilling to allow to undergraduates a larger liberty in the selection of their studies. Thus the new school, instead of footing in the College, as Professor Burgess — following in this point the plan of 1857 — had proposed, was organized wholly outside of the College, with what was practically a competing senior year, handicapped by an inferior degree.

The Trustees who were especially interested in the establishment of the School of Political Science, and to whose exertions its establishment was chiefly due, were Justice Blatchford, Hon. Hamilton Fish, Stephen P. Nash, and Samuel B. Ruggles. Two of these, Messrs. Fish and Ruggles, had participated actively in the university movement of 1857–1858. To Mr. Ruggles, the establishment of the School of Political Science was a renewal of that movement; and when, on June 7, 1880, the report of the committee on course was adopted by the Board of Trustees,

he cabled to Professor Burgess, then in Paris: "Thank God, the University is born." 1880–1904

In comparing the movement of 1857–1858 with that which began in 1880 and which has given to the University three flourishing non-professional schools, it is to be noted that the university instruction of 1858 was to be conducted by lecturers dependent wholly or largely on fees, and that these fees were to be obtained by opening the university lectures to the public. The university courses instituted in 1880 were conducted by salaried instructors and were intended for college-bred men only. On this narrower but more solid ground the Columbia graduate schools have grown slowly but steadily to their present strength.

The history of the School of Political Science is told in the following chapter; the history of the graduate instruction in other branches from 1880 to 1890 must be outlined here in order to make clear the conditions that preceded the establishment of the Schools of Philosophy and of Pure Science. The only degree at first offered to graduate students in the College proper was that of master of arts. Under the Trustees' resolution of May 6, 1878, and the Faculty's resolution of March 14, 1879, this degree could be attained either by non-resident or by resident students, but in no case was it to be awarded until three years after the attainment of the first degree. The Faculty arranged five (later, six) groups of subjects upon which candidates were to be examined, and prescribed for the non-resident students a course of reading in each subject. Resident study was at first regarded simply as an alternative method by which a candidate could prepare himself for examination. June 10, 1882, the Trustees enacted that the degree of master of arts might be conferred after one year's study in the graduate department; December 4, 1882, that the doctor's degree in philosophy, science, or letters might be conferred after

1880–1904 two years' study; December 3, 1883, that but one doctor's degree should be conferred, that of doctor of philosophy.

The system of non-residential study and examination on prescribed reading attracted very few candidates, nor was it long maintained. The graduate instruction that was offered in 1880 and actually organized in 1881 drew to the College (or rather, held in the College, for the number drawn from outside was very small) a gradually increasing body of resident students. From 1881 to 1885 the average number was twelve; from 1885 to 1890 it was twenty-nine. The average number of graduate students in the School of Mines (where tuition of graduates had now ceased to be gratuitous) was far smaller.

In the meantime what was practically a new school had been established in connection with the School of Mines. A department of architecture was organized in 1881 and placed under the direction of Professor William R. Ware. In its development the engineering side of architecture was so increasingly subordinated to the artistic that the separation of this school from the Schools of Applied Science, which occurred in 1902, was only a formal recognition of a long-accomplished fact.

In 1886 there was opened, at Columbia, a school for training librarians. It was described as a "School of Library Economy," and was under the direction of Librarian Melvil Dewey. This was the first department of Columbia to which women were admitted as resident students. The school was transferred to Albany in 1889, when Mr. Dewey resigned his position at Columbia to become State Librarian.

The further development of the University, and particularly the further development of non-professional graduate instruction, were closely connected with a new movement, that of university organization. To President Barnard expansion was of supreme interest; problems of organization had for him little attraction. In his report of 1883

he indeed proposed a more logical organization of faculties; but in his scheme he made no clear distinction between college and university instruction, nor between professional and research training; and the only suggestion of his which was afterwards accepted was that the Faculty of the School of Mines should be known as the Faculty of Applied Science. The chief impulse to the new movement came from Professor Burgess, and the organization which was developed early in President Low's administration was largely based on Professor Burgess's suggestions. The chief points of his programme were: maintenance of the disciplinary or gymnasial character of the College to the close of the junior year; the shortening of the College course, not by abandoning any portion of it, but by treating the senior year as a University year; provision for advanced instruction and for research in non-professional university faculties, coördinated and closely associated with the professional faculties; and the direction of the educational policy of the University by an academic senate composed of representatives of the different university faculties.[1] 1880–1904

That the Trustees were seriously considering the problem of university organization became evident in 1887. In his report of that year, President Barnard noted that there was pending before the standing committee on the course of instruction "a resolution which suggests the immediate adoption of energetic measures to lift the whole plane of instruction here to the level of the university standard. The resolution even suggests, inferentially at least, the expediency of abandoning the undergraduate School of Arts entirely, and devoting the whole strength of the institution to its superior work." Discussing this proposal, Dr. Barnard pointed out that the discontinuance of the undergraduate college course was neither necessary nor desirable. Its maintenance would not in any manner

[1] Burgess, "The American University," Boston, 1884.

1880–1904 interfere with the university system; its abandonment would cut off a valuable source of supply.[1] The whole subject was laid before the teaching body by the following circular letter, sent to each Faculty, except that of Medicine:

"The Trustees have appointed a committee to consider and report as to the feasibility and expediency of so modifying, extending, and elevating the course of instruction that the entire system of education offered in the college and its schools shall be placed upon a higher plane, and that the instruction hereafter to be given shall be confined to what are known as 'postgraduate studies.'

"The Committee is also directed to consider and report upon the expediency of retaining and removing the School of Arts to buildings within or without the city limits.

"The undersigned, in behalf of the Committee, request the views and opinions of your Faculty, and of its individual members in the premises.

"Wm. C. Schermerhorn, *Chairman.*
"Chas. M. Da Costa, *Secretary.*

"Columbia College, April 10, 1888."

In May and June replies were submitted by the Faculties of Law, of Political Science, and of Mines. In November a reply from the College Faculty was adopted by a two-thirds vote, and a separate reply was submitted by the minority. In the debates of the various Faculties President Barnard took no part, by reason of ill health. The College was under the guidance of Professor Drisler, as acting President.

All the replies recommended the maintenance of the undergraduate College and its continued local connection with the University. The Faculty of the School of Mines recommended elective groups in the junior year of the

[1] In his report of 1888, President Barnard, while disclaiming the intention of expressing publicly his opinion upon a matter under consideration in the Board of Trustees, set forth certain arguments for the abandonment of the undergraduate course.

College and unrestricted election in the senior year. The Faculties of Law and of Political Science and the minority of the College Faculty recommended a sharp distinction between the first three years of the College course and the fourth. The three-year course was to be substantially a course of prescribed studies, conducted by a separate body of instructors; the fourth year was to be treated as a university year, and the seniors were to have the liberty of studying under any university faculty. No bachelor's degree was to be conferred until the completion of this first university year. The Faculty of Political Science recommended the establishment of a preparatory school with a four-year curriculum, to be conducted by the instructors engaged in the work of undergraduate instruction. 1880–1904

The College Faculty desired to retain control of the graduate courses, and recommended "the relief of the professors that have charge of such courses from a proportionate amount of work in the undergraduate classes." The Faculty of the School of Mines desired to control the higher instruction of its graduates. The Faculties of Law and of Political Science recommended that the conduct of higher instruction in the natural sciences be intrusted to the Faculty of Mines; but for the conduct of the advanced courses in philosophy, letters, and philology these Faculties and the minority of the College Faculty recommended the establishment of a university faculty of philosophy. The Faculty of Political Science and the minority of the College Faculty recommended that this new faculty should be composed of the instructors who were already engaged in senior and graduate work in the subjects assigned to its jurisdiction.

For the encouragement of university study, all the Faculties concurred in recommending a liberal system of fellowships. The School of Mines Faculty suggested sixty such fellowships of $500 each, and urged that the tuition of graduates should be free.

1880–1904 The Faculties of Law and of Political Science and the minority of the College Faculty further recommended the establishment of a university senate, which should be composed of the President and of two or three representatives from each of the university faculties (Law, Political Science, Natural Science, and Philosophy). This senate was to have, subject to the control of the Trustees, the general direction of the educational policy of the University, at least in all matters of common concern, including the undergraduate curriculum.

It should be noted that at that time, as now, many professors sat in more than one Faculty. In the four Faculties (College, Law, Mines, Political Science) there were, in all, thirty-two professors. The so-called "university party," which presented the plan for the establishment of a faculty of philosophy and for the constitution of a university senate, was a minority party, numbering eleven.

February 14, 1889, the Trustees' committee on the elevation of the course appointed a committee, consisting of Acting President Drisler, Professor Thomas Randolph Price, and Adjunct Professor Nicholas Murray Butler, "to prepare and submit a plan for a university faculty of philosophy (*i.e.* of letters, philology, and philosophy)." Professor Butler was at that time the junior member of the professorial body, as Professor Drisler was the senior. On October 28, the majority of this committee presented a report suggesting a wider faculty of philosophy, which should include mathematics and the natural sciences, history, political philosophy, and sociology; proposing that courses under this faculty should be open only to students holding the first degree, who should previously, in their last college year, have pursued elective courses in the departments in which they desired to prosecute their university studies; and recommending that the degree of master of arts should be conferred upon graduate students after one year and the degree of doctor of philosophy after three years.

From these recommendations Professor Butler dissented in a minority report. He objected to the wider faculty proposed by the majority, asserting that the tendency of modern university organization was to subdivide the old faculty of philosophy into three faculties, viz.: political science, mathematics and natural science, and philosophy. He favored, accordingly, the recognition of these three faculties, with that of law, as university faculties, and he proposed a single university matriculation, which would entitle the student to pursue his studies in any single faculty, or, with the approval of the proposed university senate, in two or more faculties. He objected also to the postponement of the doctor's degree until three years after the attainment of the baccalaureate degree, advocating a three-year course beginning in the senior year of the College. He also expressed the opinion that the regulations for the higher degrees should be considered and adopted by a university senate before their presentation to the Trustees. 1880–1904

When these reports were presented, the Hon. Seth Low had just been chosen President, to succeed President Barnard. Shortly after his installation President Low addressed a general invitation to the professors to express to him their views upon the subject of reorganization. This elicited a new plan, proposed February 21, 1890, by Professor Van Amringe and some other members of the College and School of Mines Faculties. This plan differed from Professor Burgess's chiefly in proposing the abolition of the existing Faculty of Political Science (the professors of public law and jurisprudence in this Faculty were to be associated with the professors of private law in a faculty of jurisprudence, and the professors of economics were to be assigned to the College Faculty), and in providing that in the university faculties only heads of departments should have seat and voice. It was suggested, further, that if satisfactory arrangements could be made with the institu-

1880–1904 tions concerned, two additional university faculties should be established, viz.: a faculty of medicine, consisting of the heads of departments in the College of Physicians and Surgeons, and a faculty of theology, composed of the heads of departments in the General and Union Theological Seminaries. Each of the university faculties was to elect two (or three) representatives who, with the President, should constitute a university council. This council should control the non-professional university degrees and should be entitled to consider and report upon all educational matters "except the conferring of the first degree."

These proposals showed clearly how much progress the university idea had made in two years. The university faculty of philosophy and the central senate or council, proposed in 1888 by a minority, were now generally accepted, and the differences of opinion now regarded the organization of these bodies and the extent of jurisdiction to be exercised by the proposed council.

On February 27, 1890, President Low sent to each professor a pamphlet containing the various plans proposed by the different Faculties and by individual members thereof, together with a series of questions formulating the points of difference. At the head of the list he put the question, suggested by Professor Butler but hitherto not debated, whether a single matriculation fee should admit to all departments of the College and University. He invited all the members of the various Faculties to meet in the office of the President, March 12, at eight o'clock, to debate the questions proposed, adding: "In case the discussion cannot be concluded in a single evening, I shall be prepared to adjourn it to . . . March 14 and 15."

For the first time since the establishment of the professional schools the great council or full academic senate, composed of all the members of all the Faculties (except that of Medicine), was thus convened. It has not since been assembled. At the time it consisted of only thirty-

four professors. To-day (1904) the Faculty of Pure Science has thirty-four members, the Faculty of Philosophy thirty-six, and the entire professorial body numbers one hundred and thirty-four. Of the thirty-four who were summoned to meet on those March evenings, in the old President's House on 49th Street, but thirteen were still in the active service of the University in 1904. 1880–1904

All the three evenings assigned were fully occupied. On each question each professor had opportunity to speak, the youngest member of the assembly first, as in a council of war. No vote was taken on any question. The President had expressly stated, in calling this assembly together, that the purpose of the discussion was to enable him to acquaint himself thoroughly with the entire range of opinion throughout the College on these far-reaching questions.

The plan formulated by President Low and accepted by the Trustees in May, 1890, was in some respects a compromise. A Faculty of Philosophy was established, composed of the professors and adjunct professors giving instruction in philosophy, letters, and philology, and this Faculty was intrusted with the direction of university study in these departments. The qualification for admission, as in the School of Political Science, was the completion of the junior year in a college. A University Council was constituted, in which the Faculties of Law, of Mines, of Political Science, and of Philosophy were represented, each by its Dean and by an elected delegate, and in which the School of Arts (College) was also represented, *ex officiis*, by its Dean and Secretary. Except when an appointed Dean or Warden was already in office (which was the case in the Schools of Mines and of Law), the Faculties were to elect Deans. The President was to nominate two members of the Council "with especial reference to securing a rounded representation of subjects."

The University Council at the outset was an advisory

1880–1904 body, without definite powers. It was practically a President's council. It was in particular to "advise the President as to all matters affecting the master's and doctor's degrees, the correlation of courses, the extension of university work in new and old fields, and generally as to such matters as the President may bring before it." Two years later, June 6, 1892, the Trustees gave to the Council definite administrative and legislative powers. As regarded the non-professional Faculties it obtained the position of an upper house. As regarded the other Faculties it received no legislative powers, but it was clothed with the right and charged with the duty of making recommendations, not only to the several Faculties but to the Trustees, concerning the educational administration of the University. At the same time the power of nominating members was withdrawn from the President, and the Council became purely representative.

At the close of the same month in which the reorganization of the University was accomplished (May 31, 1890), the Faculty of Arts (College) unanimously resolved that courses designated by the Faculties of Philosophy, Law, Mines, or Political Science as open to students who had completed the junior year in the School of Arts or in any other college maintaining an equivalent curriculum, should be recognized as elective studies in the senior year. This resolution was referred by the Trustees to the President and Council with power; and receiving the unanimous approval of the Council, it was put in force in the following autumn. When the College of Physicians and Surgeons became an integral part of the University, a similar resolution was adopted concerning courses recommended by the Faculty of Medicine. The senior year of the College thus became in effect a university year. The result, as President Low remarked in his report of 1892, was not only to enrich the curriculum of the College, but to make it possible for those men who take both the A.B.

degree and the professional degree to shorten their period of college and university study by one year. "In recent years," he continued, "all professional courses have been lengthened. . . . The tendency of lengthening the professional course . . . is to lead men to omit the college course altogether. It is believed that the system introduced at Columbia will do much to offset this unfortunate tendency." In 1894 he reported: "As a whole, the plan has proved an unqualified success. . . . A very significant illustration of the effect of the system is seen in the increasing number of Columbia graduates who remain in the University after receiving the first degree." In 1895, in discussing the possibility of raising the standard of admission to all the professional schools "until a liberal training equivalent to the old-time college course is demanded as a condition for admission to every one of them," he pointed out that the most serious obstacle to such a policy was the length of the combined college and professional courses. If these were not shortened, "only one result can follow: the colleges will be syphoned of their intending professional students, and such students will go direct from the high schools to the schools of law and medicine." He recommended accordingly that certain pre-professional studies be made elective in the junior year. 1880–1904

In 1896 a further step was taken. The College adopted a new curriculum, which went into effect July 1, 1897, and which made it possible for students intending to enter any one of the Columbia Schools of Applied Science to anticipate two years of professional work, and to secure both the college degree and the professional degree in six years.

This "Columbia plan," as it has come to be known in educational discussion, has been adopted by several American universities, and a large number of independent colleges have introduced semi-professional or professional studies in the later years of the baccalaureate course.

1880–1904 Objection to the plan has been raised on two grounds, viz.: that it is not open and above-board, in that it classes among college students those who have really become professional students, and that it is pedagogically unsatisfactory, in that it divides the students' interests and allegiance between the college and the professional school. In the years 1902–1904, in consequence of President Butler's suggestion that all professional study at Columbia should be based on a two-year college course, and that a first degree or certificate might be given to all students who should satisfactorily complete such a course, the existing system was resubjected to full discussion; and the University Council, at a special meeting held March 5, 1904, recommended by a four-fifths majority that the shortened courses for the collegiate and professional degrees should not only be retained but should be further developed. The Council plan would involve the award of the first degree on any of the following combinations, viz.: a three-year college course and one year of study under the Faculties of Political Science, Philosophy, or Pure Science; a three-year college course and one year of legal study; a two-year college course and two years of study under any of the other professional Faculties. The Council further recommended that students pursuing courses offered by a professional Faculty, not as a part of their general education but with a professional aim, should be primarily registered in the professional school and placed under the jurisdiction of its Faculty; and that unless they should be so registered, the courses pursued by them should not count toward the professional degree.

Until 1898 students who had completed the junior year at other colleges maintaining an equivalent curriculum, and who then became seniors at Columbia, enjoyed the privilege of electing a full year of professional study. Since that time, in consequence of a resolution adopted by the

PETER AUGUSTUS JAY, LL.D. (HARVARD, COLUMBIA)
Chairman of the Trustees, 1832–1843

Faculty of the College, this privilege has been granted only to students who enter Columbia not later than the beginning of the junior year. 1880–1904

The year of reorganization (1890) was followed by years of active internal development and of further expansion. In 1891 the Trustees granted to each professor in the University the privilege of taking, on half-pay, a year's leave of absence once in every seven years, with the limitation, however, that such leave of absence should not be granted to more than four professors in any academic year. In 1903 the number who might enjoy the so-called "sabbatical year" was increased to six. At the same time (1891) a pension system was established, under which any professor who has been in the service of the University for fifteen years and has reached the age of sixty-five is entitled, on his own application, to be retired from active duty on half-pay.

In the same year two measures were adopted to make graduate non-professional instruction available to larger numbers of students. Twenty-four university fellowships were established, of the value of $650 each ($500 and free tuition), twelve to be awarded for the year 1891–1892, eighteen for the year 1892–1893, and twenty-four for each year thereafter. The award was intrusted to the University Council. In consequence of the increase in the number of special fellowships endowed by private benefactions, these university fellowships were subsequently reduced in number to eighteen. Unlike the fellowships bestowed between 1871 and 1891, these were open, from the outset, to graduates of any college or university; and their value in attracting to Columbia from all parts of the United States, and also from Canada, students of special ability who intend to become teachers has been very great. It was only after the establishment of these fellowships that graduates of the School of Political Science began to be appointed in considerable numbers to teaching positions

1880–1904 in leading American colleges and universities. The fact that such appointments were being made attracted other graduate students of the same class; and when instructors trained at Columbia began to send their students to Columbia for graduate work, the "primary registration" in the School of Political Science grew far more rapidly than in the earlier pre-fellowship period. Through this wise liberality of the Trustees, the Schools of Philosophy and of Pure Science enjoyed from their establishment the encouragement which the School of Political Science had lacked in the first decade of its existence.

In 1891, also, the Trustees initiated a system of alliances with neighboring theological seminaries which has not merely made Columbia's graduate instruction available to students in these seminaries, but has practically given to Columbia University the fourth of the traditional faculties — theology — and in a fashion singularly foreshadowed by the supplementary charter of 1755 and the resolutions of the Regents in 1784. Columbia's "Faculty of Divinity" is now in fact composed, as was suggested by the Regents, of "such professorships as may be established by the different religious societies within the state." In 1891 the General Theological Seminary of the Protestant Episcopal church and the Union Theological Seminary of the Presbyterian church were invited to enter into relations of educational alliance with Columbia. The Union Theological Seminary accepted the proposal at once. By an agreement dated June 8, 1891, the educational facilities of each institution were made available, under suitable conditions, to students of the other, without payment of any additional tuition fee; certain subjects taught at the Seminary were recognized as minor subjects for the master's and doctor's degrees at Columbia; and the President of the Seminary obtained seat and advisory voice in the University Council. More tardily, October 22, 1903, the General Theological Seminary

entered into a like agreement and its Dean received the same privileges. Similar relations of reciprocity, without representation, were established in 1892 with the Jewish Theological Seminary of New York City ; in 1899 with the Drew Seminary of the Methodist Episcopal church at Madison, New Jersey ; and in 1902 with St. Joseph's Theological Seminary of the Roman Catholic church at Yonkers, New York. 1880–1904

In the same year (1891) the College of Physicians and Surgeons became an integral part of Columbia University. It is worthy of note that as the alliance of 1860 followed the tentative university developments of 1858, so the real union of 1891 followed the reorganization and expansion of 1890. By a provisional agreement between the Trustees of the two institutions, signed February 4, 1891, the College of Physicians and Surgeons surrendered to Columbia College all its property, and Columbia accepted the property subject to the trust with which it was charged, viz., the maintenance of medical education. The College of Physicians and Surgeons became subject to the administrative and educational control of the Columbia corporation with the following limitations, viz.: that its Faculty should "have the right in perpetuity of nomination to the corps of instruction in the medical department, and the right to refuse instruction to women." By an act of the New York legislature, approved March 24, 1891, the Trustees of the College of Physicians and Surgeons were empowered to transfer their property and to surrender their separate charter ; and by an agreement of June 5, 1891, the provisional agreement of February 4 was approved and confirmed. Like the other University Faculties, the Faculty of Medicine sends its Dean and an additional delegate to the University Council. In 1893 the medical course was lengthened to four years, the new rule being first applied to the students entering in 1894. In 1898 the University Council recommended that the

1880–1904 College of Physicians and Surgeons should be made a graduate school as soon as such a change should be financially practicable. In 1901, by a resolution of the Faculty of Medicine, approved by the Trustees, a preliminary step was taken toward this goal: it was provided that after July 1, 1903, the requirements for admission to the School of Medicine should be the same as for admission to Columbia College. They have in fact been made more rigorous, in that a larger proportion of the preliminary studies are definitely prescribed.

In 1891 the School of Law was reorganized. In 1878 this school came under the effective control of the corporation, and an examination for admission was required of students not graduates of any college. In 1878 and 1879 two new professors were appointed, in order to relieve the Warden, who had thus far conducted the entire instruction in private law, of a portion of his responsibilities, and in order to insure that the school should not be suspended or even temporarily disorganized by the death of its founder. In 1888 a three-year course went into effect, as regarded the students entering in that year. The first third year class, that of 1890–1891, was largely instructed by members of the Faculty of Political Science. In 1891 it was decided by the Trustees that a new curriculum should be established, requiring a larger number of hours of attendance, and making it impracticable for students of the first two years to combine, as had been their practice, study at the school with training in law offices. The courses offered by the Faculty of Political Science in constitutional, administrative, and international law were made elective for the law degree. Before this new curriculum was adopted, Professor Dwight asked to be retired; and upon its adoption, two other professors resigned their chairs and opened an independent proprietary school of law, in which the "Dwight method" of instruction was to be perpetuated. They carried with them to a large extent

what may not inappropriately be described as the good-will of the business, and the attendance in the Columbia School of Law was very greatly reduced. The Faculty was promptly reconstituted; and under the guidance of Dean William A. Keener, appointed professor of law in 1890, the school steadily increased in membership until 1903, when the requirement of a college degree or an equivalent education as a condition for admission, announced four years previously, went into operation. 1880–1904

In 1893 the degree of master of laws was established, to be awarded on recommendation of the Law Faculty to students completing a fourth year of legal study. In the following year the degree was made a university degree, to be awarded on recommendation of the University Council to students who, after completing the junior year of a college course, should pursue the studies of law and of political science for four years. Few of these degrees have been awarded, because the majority of the law students who have specialized in public law and comparative jurisprudence have preferred to become candidates for the doctor's degree in the Faculty of Political Science.

In 1892 a third non-professional faculty was established, that of Pure Science. It was charged with the higher instruction and with research training in the field of mathematics and of the natural sciences. In the reorganization of 1890, these duties had been assigned to the Faculty of the School of Mines. If a Faculty of Pure Science had been then established, it would have been merely a large committee of the Mines Faculty. In the intervening period of two years the situation had changed. With the assistance of a bequest of $100,000 from their late colleague Charles M. Da Costa, the Trustees organized, in 1891, a strong department of biology, — a department which had no natural place in the Schools of Applied Science. The first Da Costa professor, Henry Fairfield Osborn, was curator of mammalian palæontology in the

1880–1904 American Museum of Natural History; and by an agreement made in the following year the Museum placed its collections at the service of the instructors and advanced students of Columbia. In 1891 the New York Botanical Garden was organized and placed under the supervision of a board which included the President of Columbia and the Columbia professors of botany, chemistry, and geology, and it was evident that within a few years the opportunities for research work in this field would be unexcelled in any part of the country. In 1891, also, the Faculty of Medicine became an integral part of the teaching force of the University, and it seemed desirable to associate the research work conducted by this Faculty with the similar work conducted in other departments. Accordingly, in 1892, the Trustees established the Faculty of Pure Science, composed at the outset of the professors of biology (later described as professors of zoölogy), of the professor of physiology in the Faculty of Medicine, and of the professors of mathematics, physics, mechanics, astronomy, chemistry, geology, mineralogy, and botany in the Faculty of the School of Mines.

In 1896 arrangements were made with the New York Botanical Garden, by which the greater part of Columbia's botanical collections and of its botanical library (including the famous herbarium and the valuable botanical books presented to the College in 1860 by Dr. John Torrey) were to be deposited in the museum of the Garden at Bronx Park, while the Garden, on its part, was to supply all needed facilities for research to the instructors and students of the University. These arrangements went into operation in 1899, and since that time the advanced work of the University in botany has been conducted at Bronx Park.

With the establishment of the Faculty of Pure Science the reorganization of the teaching force, begun in 1890, was practically completed. This force was grouped in

seven Faculties, one having charge of the old College, three of professional schools, and three of non-professional graduate education. All of these Faculties were integral parts of the University system and subject to the authority of the corporation. Each Faculty was self-governing, electing its own administrative officials; all were represented in a federal Council, in which a general will could be developed and expressed on questions of educational policy. In the University Council the natural sciences had equal voice with the "humanities" and the social sciences, for the representation of the College proper was regularly divided between these two groups. 1880–1904

Outside of this consolidated and yet flexible organization, centralized as regarded legislation, decentralized as regarded administration, living not only at the centre but in every part, the influence of the University and the scope of its work were expanding, and were destined further to expand, by treaties with independent institutions. These might be mere reciprocity treaties; they might establish educational alliances of more or less intimacy, like those with the theological seminaries and with the Botanical Garden; they might also, as the sequel was to show, establish unions perfect on the educational side — unions which should subject the contracting institutions to the educational control of the University and leave them independent only on the side of property and finances.

By treaties — or at least mainly by treaties — was solved one of the problems most urgently pressed upon the College and the University by a portion of the New York public and by President Barnard in his later reports, — the problem of coöperation in the higher education of women. Dr. Barnard urged the admission of women to the College proper on the same terms as those on which men were admitted. He saw no valid objections to making the College completely coeducational. To this the Trustees would not consent; but in 1883 they established a so-called col-

1880–1904 legiate course for women. This was simply a system of examinations without instruction. To those who completed any part of the course certificates were issued; and in 1887 it was provided that women who passed all the required examinations should receive the degree of bachelor of arts from Columbia, and should be permitted to proceed in the same manner, *i.e.* by non-resident study and by examinations, to the attainment of the higher non-professional degrees.

In 1889 a separate College for women was established, independent in its finances, but dependent on Columbia for its instructors. In recognition of President Barnard's interest in the higher education of women, the new College was called by his name. Its course of study was to be identical with that of Columbia, and to students fulfilling equivalent requirements Columbia was to grant degrees. After the establishment of Barnard College no further registrations were received at Columbia in the collegiate course for women; all female candidates for the degrees of A.B., A.M., and Ph.D were registered as undergraduate or graduate students at Barnard.

Barnard College was always necessarily a neighbor of Columbia. It was first established in Madison Avenue near 49th Street; and when the University moved to its present site, Barnard moved also.

The system of separate instruction presented no serious difficulties as regarded the curriculum of the first three years; but Barnard College found itself unable to secure for its seniors anything approaching the range of election offered to seniors in Columbia College, to say nothing of the graduate courses. Strong pressure was accordingly brought to bear on the non-professional Faculties of Columbia to open their courses to women. By arrangements which are described in the following chapter, the Barnard seniors and graduates were admitted in 1891 to the majority of the courses offered by the Faculty of

Philosophy, and in 1897 to a large number of those offered by the Faculty of Pure Science. In 1898 women holding the first degree were admitted to the purely graduate courses offered by the Faculty of Political Science in history and in economics. For the separate instruction of the Barnard seniors in mathematics, history, and economics, provision had already been made in 1895, by the establishment in Columbia University, on Barnard foundations, of three new professorships. 1880–1904

By treaty, again, Columbia added to its educational system a new professional school, for the training of teachers. Teachers College was an independent institution established to give to persons intending to become teachers a more scientific training than was afforded by the existing normal schools. It was an outgrowth of the Industrial Educational Association, of which Nicholas Murray Butler became the executive head in 1886. It was founded in 1888 and chartered in 1889. From the outset it admitted men and women on an equal footing. February 1, 1893, an agreement was concluded between Columbia and Teachers College, by which the College was placed, as regarded courses leading to the degrees of A.B., A.M., and Ph.D., under the educational direction of the Columbia Faculty of Philosophy ; and the President of the College and the professors conducting the more advanced courses (those of the final year in the baccalaureate curriculum and those leading to the degrees of A.M. and Ph.D.) obtained seats in the Faculty of Philosophy and votes in matters affecting Teachers College. Teachers College retained the right to grant certificates, but all degrees were to be granted by Columbia on such conditions as it might prescribe. Students in either institution were to enjoy the educational advantages of the other. Barnard College might become a party to this agreement, in which case women in Teachers College, by registering themselves in Barnard College, might become candidates for degrees. Barnard College acceded.

1880–1904 At the time when this agreement was executed, Teachers College and Columbia occupied widely separated sites; but Columbia had already decided to remove to its present location, and Teachers College arranged to accompany it. In January, 1898, a new agreement was concluded between the two institutions "for the purpose of including Teachers College as a professional school for teachers in the educational system of the University." The new points in this agreement were as follows: the President of the University became *ex officio* President of Teachers College; a Dean was to be appointed by the Trustees of Teachers College on the nomination of the President of the University; the College was to be represented in the University Council by its Dean and by an elected delegate with the right to vote on matters affecting Teachers College; certain Columbia professors were to have seats in the Faculty of Teachers College; courses leading to the degree of A.B. were to be subject to the approval of the Faculty of Columbia College, courses leading to the degrees of A.M. and Ph.D. to the approval of the University Council; and the granting of certificates to students who at the same time should be candidates for a degree was likewise made subject to the approval of the University Council. There was again the stipulation that Barnard College might become a party to the agreement, and that in such case female students in Teachers College might become candidates for degrees by registering in Barnard College; and again Barnard College acceded.

By an agreement dated January 19, 1900, which is still in force, Barnard College was similarly included in the educational system of the University, the President of the University becoming its President and a member of its Board of Trustees; and its Dean being appointed by the President of the University "by and with the advice and consent of the Trustees of Barnard College." The Dean of Barnard received a seat in the University Council and

the right to vote upon all questions. Barnard was also to be represented by an additional delegate whenever it should "maintain ten or more professors in its Faculty," — a condition fulfilled in 1903. 1880–1904

Under this agreement Barnard professors are appointed by the University, on nomination by the Dean with the approval of the Trustees of Barnard College and of the President of the University. All the instruction for women leading to the degree of bachelor of arts, with the exception of certain courses offered in Teachers College, is given separately in Barnard College; and all instruction for women holding the first degree and desiring to pursue non-professional graduate courses is given by the Columbia Faculties of Philosophy, Political Science, and Pure Science.

Over its courses leading to the degree of bachelor of arts Barnard College has full control, but the bestowal of the degree upon its students by the University is made conditional on the maintenance of a standard equivalent to that of Columbia College, and power is vested in the University Council to prescribe the manner in which the equivalency of the two degrees shall be maintained.

The terms on which Barnard College was brought into the educational system of the University differed in some respects, it will be observed, from those on which Teachers College was received in 1898. On April 6, 1900, a new agreement was made with the latter institution. This agreement, which is still in force, gives to the representatives of Teachers College in the University Council the right to vote upon all questions. Teachers College grants neither degrees nor "diplomas," but the University confers "such diplomas as may from time to time be authorized by the Trustees of Teachers College and approved by the University" and "an appropriate degree in addition to a diploma" upon conditions "determined by the Faculty of Teachers College in conformity with

1880–1904 regulations to be adopted by the University Council and approved by the Trustees of the University."

Under these agreements Barnard and Teachers Colleges retain their separate charters, not surrendering any rights thereby granted but only waiving the exercise of certain rights. Each retains its separate property, and the financial administration of each is conducted by its own Board of Trustees. In educational matters, however, both institutions are subject to the control of the University, exercised chiefly through the University Council. In his report of 1900, President Low affirmed that "these corporations, while retaining their separate existence, have become in fact as completely a part of the educational system of the University as though the work that they are doing were being carried on under the University charter."

In the whole process of expansion by treaty, from the alliance with the Union Theological Seminary in 1891 to the agreement (presently to be noted) with the College of Pharmacy in 1904, the University Council has proved itself an instrument of great value. It has adapted itself by the flexibility of its organization to every form of combination. It has given to Columbia's different allies, and to the same ally at different times, different degrees of representation, in proportion to the importance of the allied institution and the intimacy of the alliance. It has greatly aided in promoting complete educational union. It is hardly to be assumed that independent boards of trustees would as readily have surrendered their educational powers to another and similar board as to a strictly educational body. It is not saying too much to affirm that it is the Columbia University Council, itself a new thing in university government, that has made educational federations of this new type possible ; and if so brief an experience justifies any prophecy, it is safe to assert that this representative Council will so largely

insure the satisfactory working of these federations as to make them permanent. 1880–1904

As regards the coöperation of the University in the higher education of women, the solution at present attained at Columbia is as follows: separate college education to the close of the senior year, conducted largely by the same instructors who are teaching in Columbia College, and maintained through the supervisory powers of the University Council upon the same plane as the college education given to men; admission of women, on equal terms with men, to two professional schools (Teachers College and the College of Pharmacy); and admission of women holding the first degree to nearly all the advanced non-professional courses in the University.

As regards the shortened combined course for the first and professional degrees, the arrangements between Columbia, Barnard, and Teachers Colleges harmonize with the Columbia plan adopted in 1890 and further developed in 1896. Seniors in Columbia and Barnard Colleges may elect professional courses offered by Teachers College, and such courses count at the same time towards the degree of A.B. and towards the professional diploma. Students who have completed the sophomore year in any college may obtain a first degree (in this case not the A.B. degree, but that of B.S.) on the completion of two years' work in Teachers College.

By their alliance with Columbia, Barnard and Teachers Colleges not only became sharers in the educational opportunities offered by the University but also in its prestige. Barnard College has increased in numbers more rapidly than the old College itself. Teachers College also has grown rapidly, especially in the number of men attending its courses and in the number of its graduate students.

One of the most significant results and signs of Columbia's university development has been the growing mass

1880–1904 of scientific literature produced by its professors and advanced students, and the increasing number of journals and other serial publications edited at the University or with the coöperation of its officers. Of the thirty-five serial publications appearing in 1904 which were under the control of the University or of its officers, twenty-six had come into existence since 1889. In 1893 there was organized, with the approval of the Trustees, the Columbia University Press, for the purpose of promoting the publication of works embodying the results of original research. It is a private association (incorporated June 8, 1893), related directly to Columbia by the provisions that its Trustees shall be officers of the University and that the President of the University shall be its President. In the same year arrangements were made by which the Macmillan Company became publishing agents for the Press.

Until 1896 Columbia had modestly retained its old name. The University was still Columbia College; the college proper was distinguished from the other schools as the "School of Arts." As early as 1882 President Barnard asserted that Columbia "had taken on the functions and assumed the character of a proper university"; although, as he added, it still fell far short of what a fully appointed university ought to be. In the reports of the several Faculties to the Trustees' committee on the elevation of the course, in 1888, the complex of existing schools was frequently referred to as the University, and the Faculty of Political Science recommended "that the term 'College' should be restricted to the disciplinary department and that the University, established in fact, should be called by its right name." The reorganization of 1890 produced a "University Council"; in the following year, "university fellowships" were established; and in the revised statutes adopted by the Trustees all of the Faculties except that of the School of Arts were described as the

"University Faculties." In 1891 the Trustees authorized the President to describe the institution, in its publications, as a university, but this the President was not yet inclined to do. On February 3, 1896, the Trustees resolved: 1880–1904

"That in all official publications hereafter issued by or under authority of the Trustees, all the departments of instruction and research maintained and managed by this corporation may, for convenience, be designated collectively as 'Columbia University in the City of New York' or 'the University'; and the School of Arts, as the same is now known and described, may hereafter be designated as 'Columbia College' or 'the College.'"

This usage has since prevailed, although the legal name of the corporation remains unchanged. Since 1900 Barnard and Teachers Colleges have been treated as integral parts of Columbia University. The property-holding corporations are Columbia, Barnard, and Teachers Colleges, and the College of Pharmacy; the educational unity is Columbia University.

Revision of nomenclature once initiated, further changes were made. The different professional courses which had grown up in the School of Mines, or at least the principal groups of professional courses, were properly recognized, as President Barnard had recommended thirteen years earlier, as separate schools. The name of the School of Mines, not merely time-honored but celebrated by the achievements of its graduates, was not abandoned, but it was restricted to describe the courses leading to the degrees of engineer of mines and metallurgical engineer. In addition there were established, or rather there were recognized, the School of Chemistry, with courses leading to the degree of bachelor of science; the Schools of Engineering, with courses leading respectively to the degrees of civil engineer, electrical engineer, and mechanical engineer; and the School of Architecture, with a course leading to the degree of bachelor of science.

1880–1904 These schools were left under the direction of the existing single Faculty, but this Faculty was now described, again as President Barnard had suggested, as the Faculty of Applied Science.

By resolutions of June 2, 1902, the Trustees removed the School of Architecture from the jurisdiction of the Faculty of Applied Science. At the same time they removed from the Faculty of Philosophy the department of music. This department was established in 1896, with the aid of the Robert Center fund for instruction in music, the gift of Mrs. Ludlow; and it was organized by Columbia's first professor of music, Edward Alexander McDowell. The purpose of the Trustees in removing architecture and music from their previous separate environments was "that these departments may serve as the nucleus for an adequate and creditable university school of fine arts in the future." In his report of 1902 President Butler explained that it was no part of the plan that the University should give practical instruction in the fine arts. The University should give the historical, philosophical, and theoretical instruction, leaving to other teachers and organizations the practical training and apprenticeship which is a necessary part of all art education.

Whenever the School of Fine Arts shall be organized, it will find some of the facilities it will require already provided. The Avery Architectural Library is more than a nucleus for an art library; it is already such a library. An agreement concluded in 1892 with the Metropolitan Museum gives Columbia's art students opportunities similar to those which are secured to the students of biology by the arrangement made at the same time with the Museum of Natural History and shortly afterward with the New York Botanical Garden. Under the agreement with the Metropolitan Museum Columbia students are admitted on presentation of cards signed by the President of the University; permission is granted to

THE MAPES GATE, THE GREEN, HAVEMEYER, AND ENGINEERING

sketch or copy objects of art; and lectures may be delivered in the rooms in which the collections are displayed. 1880–1904

During the last decade of the century, Columbia made increasing provision for the extension of its educational advantages to others than its regular students. In 1892 its system of public lectures was largely extended. For several years free lectures had been given at the College; in 1892 arrangements were made with the authorities of Cooper Union, by which the Union gave the hall and defrayed the incidental expenses, and Columbia provided the lectures. The agreements already noted with the Museum of Natural History and the Metropolitan Museum made similar provision for public lectures, and since 1893 university lectures have been given at these institutions.

Since 1898 "extension" courses have been given on a larger scale and in a more systematic way under the auspices of Teachers College. In 1898–1899 courses for teachers were given in Brooklyn, in coöperation with the Brooklyn Institute of Arts and Sciences; and also in the boroughs of Queens and Richmond. Since that time the work has steadily expanded and has been placed under the control of a special officer — the "Director of the Extension Department in Teachers College." In 1903–1904 the director reported 1590 extension students.

Since 1900 the University has maintained a Summer Session, open to men and women on equal terms, and attended largely but not exclusively by teachers. It is conducted by an administrative board composed of the President of the University, the Dean of Teachers College, and a Director. The range of subjects treated, the number of courses offered, and the number of students registered have increased rapidly. In 1903 summer courses in medicine were established. The attendance at the Summer Session of 1903 was 1001.

1880–1904 Both in the extension courses and in the Summer Session it has been the effort of the University authorities to maintain the same standards as at the University in its other sessions. Under regulations adopted by Teachers College, extension and summer courses satisfactorily completed count toward its professional diplomas. Under regulations adopted by the University Council, such courses may count toward the baccalaureate degree; and attendance in certain courses in the Summer Session may be accepted as a partial fulfilment of the residence requirements for the higher degrees.

The opening of Columbia's fourth half-century will be marked by further expansion. By treaty with the College of Pharmacy the University has secured another professional school; and through the generous gift of Mr. Joseph Pulitzer of New York it will be enabled to develop still another — a School of Journalism.

The College of Pharmacy, founded in 1831, is older than any part of the University except Columbia College and the College of Physicians and Surgeons. It owns and occupies a building recently erected on West 65th Street between Amsterdam Avenue and Broadway. Geographically as well as in other respects it constitutes a connecting link between the medical work of the University on West 59th Street and the general scientific work conducted on Morningside Heights. A personal bond of connection also has long existed; Dr. Charles F. Chandler, one of the original Faculty of the School of Mines and long its Dean, a member also for many years of the Faculty of the College of Physician and Surgeons, has been for many years professor of chemistry in the College of Pharmacy and for several years its President. The agreement between Columbia and the College of Pharmacy, which was concluded March 15, and took effect July 1, 1904, is drawn on the same lines as the agreement of

1900 with Barnard and Teachers Colleges. Its declared purpose is to include the College as a professional school for pharmacists and pharmaceutical chemists in the educational system of the University. The President of the University becomes its President; its Dean, to be appointed by its own Board of Trustees on the nomination of the President, has seat and vote in the University Council; and when it shall maintain ten or more professors in its Faculty, it is to have an additional representative. Representatives of the University departments of botany, chemistry, physiological chemistry, and materia medica are to be added to its Faculty. The educational opportunities of the University and of the College are made fully available to every qualified student who has duly matriculated in either institution. The University is to confer such degrees and diplomas as may be authorized by the Trustees of the College of Pharmacy and approved by the University Council; the College retains the direction and control of its instruction and the right, with the approval of the Council, to grant certificates to students who are not candidates for a degree or diploma. The College of Pharmacy retains its property, and its finances are managed by its own Trustees. The agreement is terminable on one year's notice. 1880–1904

On July 20, 1903, the Columbia Trustees executed a formal agreement with Mr. Joseph Pulitzer of New York, to establish and maintain a School of Journalism as one of the professional schools of the University. For this purpose Mr. Pulitzer gave to the Trustees the sum of one million dollars, and promised to give an additional million when he should be satisfied that the school had been in successful operation for three years. Concerning the projected school President Butler said in his report of 1903:

"With the establishment of a School of Journalism of university grade, a new academic field is entered upon.

1880–1904 While in a sense this undertaking is experimental, yet it is the judgment of the University, and that of a large and influential portion of the newspaper press, that it will be abundantly successful. If journalism is a calling for which no previous training is desirable or necessary, then it must be held to be an exception to all other professions, trades, and occupations. Natural aptitude will always lay the surest foundation for usefulness in any career, and practical experience well analyzed and understood is of prime importance; but between the two lie the study of principles and practices, the acquirement of the subsidiary information which must be drawn upon, and the practice under criticism which gives to the beginner the benefit of the experience of others. All these this University can furnish for journalism, as it furnishes them for engineering and for teaching. The University cannot guarantee to produce good newspaper men any more than it can guarantee to produce good engineers or good teachers; but it can and will train students to become such if they have the root of the matter in them.

"In organizing and carrying on the School of Journalism the Trustees, the University Council, and the Faculty of Journalism will have the advantage from the outset of the suggestions and criticisms of an Advisory Board to be composed of 'the foremost journalists and editors possessing expert knowledge on the subject,' the members of which will be appointed by the Trustees upon the nomination of Mr. Pulitzer."

Pending the appointment of the advisory board, a committee appointed by President Butler framed a report regarding the organization and academic relations of the School of Journalism. This report was submitted to and amended and approved by the University Council. At the same time the Trustees' committee on buildings authorized the preparation of preliminary plans for a building, to be placed on the Amsterdam Avenue side of the Quadrangle, south of Fayerweather Hall.

At the opening of its fourth half-century, Columbia, as an educational unity, will consist of eleven faculties, con-

ducting fourteen colleges and schools. In this enumeration the inchoate Faculty of Fine Arts is not included, nor any of the allied institutions that are not subject to the educational control of the University. Classified from the point of view indicated at the beginning of this chapter, Columbia will include (1) two colleges of the familiar Anglo-American type; (2) three non-professional graduate schools, corresponding very closely to the most recent divisions of the German Faculty of Philosophy; (3) nine professional schools, two of which, those of Law and Medicine, correspond to traditional university faculties of the old world, while the remaining seven — the Schools of Mines, Engineering, Chemistry, Pharmacy, Architecture, Journalism, and Teachers College — represent the wider hospitality and more catholic ideals of the American university. 1880-1904

Of the professional schools one only, the School of Law, is a university school, in the sense that a preliminary college training is required for admission to its courses. The Schools of Applied Science and of Architecture, however, have raised their entrance requirements very considerably beyond those of Columbia College, and the average age of their first-year students is greater by nearly two years than the average age of the College freshmen. In Teachers College, moreover, no students are admitted as candidates for a degree except upon the basis of a preliminary two-year college course.

The equipment with which the students enter Columbia's professional schools is, of course, in a considerable proportion of cases, in excess of that which is required. In his report of 1903, President Butler pointed out that 30 per cent of the medical students, 14 per cent of the students in the Schools of Applied Science, and 35 per cent of the students in Teachers College had already obtained a first degree. In the whole University there were, in 1902–1903, over twelve hundred graduate students,

1880–1904 and of these nearly one-half were students in the professional schools.

The policy of placing all the professional schools upon a basis of preliminary college training, advocated as we have seen by President Low and by the University Council, was reaffirmed by President Butler in his first report (1902). That it has the support of practically the entire teaching body was shown by an inquest instituted in the autumn of 1902. Those advocating such a policy numbered one hundred and two, those dissenting nine. The vote of each professional Faculty, and the length of the preliminary college course advocated for each school, are indicated in the following table:

Faculty	In Favor of a Preliminary College Course of			Against such Requirement
	Four Years	Three Years	Two Years	
Law	4	2		
Medicine . . .	2	6	6	2
Applied Science		3	20	4
Teachers College		5	10	3

The history of the development of the University, as outlined in the preceding pages, is substantially a history of the formation or acquisition of faculties and schools. The development of new departments of instruction and research falls properly within the special histories of the several schools. Since 1896, however, there has developed, without legislative impulse or warrant, a third form of organization, which in many instances runs across the faculty lines, viz. : that of the so-called "divisions." The division is an association of departments naturally related and having many common interests. The ends subserved

by the divisional organization are the better correlation of courses and, through "divisional announcements," the clearer indication to students of the opportunities offered in the same general field of studies in different parts of the University. Spontaneously developed, the divisional organization has been extended and systematized by administrative action, and the annual statements published by the University regarding courses of instruction and of research have assumed in President Butler's administration (except as regards the professional courses in law and in medicine) the form of divisional announcements. The divisions are not legislative or administrative but deliberative bodies. They have no authority over the departments of which they are composed, nor have they any immunities against the faculties in which the several departments are included. 1880–1904

In considering the causes of Columbia's rapid growth, the effect of the removal of the University in 1897 from its inadequate and unattractive situation on 49th Street to the spacious grounds and dignified buildings of its new home must not be forgotten. Apart from the fact that many departments, notably those in the Faculties of Pure and Applied Science, gained for the first time the room required for the proper conduct of their work, the moral effects of the removal on the Faculties, the students, and the public were very great. When the removal was being planned, Professor Ware said, with more truth than is usually found in an epigram, that it would transform Columbia from a private into a public institution. From the moment at which the removal was announced, the springs of private benefaction were opened; and in more than one year of President Low's administration the gifts to the University greatly exceeded in value all those received by Columbia prior to 1890.

The growth of Columbia's teaching force and student

1880–1904

body during the past fifty years is shown in the following table :

Academic Year	Instructors	Students
1853–1854	13	172
1878–1879	94	1410
1883–1884	114	1456
1888–1889	203	1712
1893–1894	251	1804
1898–1899	339	2610
1903–1904	455	4709

Scarcely less significant are the figures regarding the increase of the Columbia Library; for while a great library does not make a great university, a university is not conceivable without a great library. In 1864 the Columbia Library included about 15,000 volumes. In 1889 the number of volumes was nearly 100,000 ; in 1904 it was 362,000. One advantage which this library possesses by virtue of its recent rapid growth is, as the Librarian has stated in a recent article, that "its list of 'dead books' is very small."

Here again the resources and opportunities of the Columbia of to-day are imperfectly indicated by its own possessions. Under reciprocity arrangements similar to those which have so greatly expanded its educational activities, the students of Columbia have access not only to the libraries of the New York Botanical Garden, the College of Pharmacy, the Metropolitan Museum, the Museum of Natural History, and the General and Union Theological Seminaries, but also to the Lenox and Astor Libraries and to the libraries of the New York Historical Association, the New York Academy of Medicine, and other similar institutions and organizations.

The present position of Columbia was felicitously described by President Butler in his first report (1902):

"Under the leadership of President Low the hopes and the prophecies that had been cherished and made for a

generation were fulfilled. . . . The college which had served New York so long and so well became the modern many-sided university, of which the old Columbia College is the foundation. This University, carried to a new and fitting home on a site of great beauty and appropriateness, has quietly and naturally taken its place as one of the small group of truly national universities . . . reflecting, each in its own way, the nation's idealism, its love of knowledge, its zeal in investigation and invention, and its practical skill in applying scientific principles in action." 1880–1904

This position Columbia has attained by discounting the support which the citizens of New York owe it. In spite of the appreciation of its property and the generous gifts and bequests it has of late received, its means have become inadequate for even its most pressing needs. Its rapid development of numerous branches of instruction and research, undertaken simultaneously with its removal to a new site and the erection of new buildings, has so strained its resources that it is now carrying a debt of nearly five millions, with a correspondingly heavy interest charge. It is true that the property of the University has increased during this period by an amount much greater than this debt, but the additions to its property have been of such a character as to increase expenditure far more than they have increased income. For several years, accordingly, the University budgets have shown formidable deficits. In large measure these deficits have thus far been covered by annual subscriptions; but in soliciting and obtaining these subscriptions the University has been consuming its principal, for the generosity of the public is an asset which should contribute to the development of a university rather than to its mere maintenance. To put the University on a satisfactory financial basis, the existing schools and departments which rest on the Columbia foundation should receive productive endowments to the amount of at least four millions, and Barnard

1880–1904 and Teachers Colleges should receive for the same purpose two millions. This estimate does not include the erection of new buildings nor the endowment of new departments of instruction and research. New buildings, however, are already needed, and if Columbia is to maintain its leading position among the great American universities, it will need further endowments for the next ten years at the rate of at least half a million a year.

During the past quarter of a century, New York has obtained, with little cost to its citizens, a national university of the first rank. The question of the next quarter of a century, or rather of the next few years, will be: Will New York maintain Columbia in this position?

MUNROE SMITH.

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CHAPTER II

THE GRADUATE SCHOOLS

POLITICAL SCIENCE, PHILOSOPHY, AND PURE SCIENCE

"THE non-professional graduate schools" is the name usually given to those parts of Columbia University in which courses are offered leading to the degrees of A.M. and Ph.D., and in which students who have received an adequate general education are trained in methods of research in history and the social sciences, in the other "humanities," and in mathematics and the natural sciences. The name is not happily chosen; at least it does not accurately define the place or purpose of these schools in the university system. They are not the only schools frequented by graduates; nor are they the only schools which require for admission a preliminary course of study in a college or scientific school. Their students are not working without reference to preparation for self-support, and their courses are designed to prepare men and women for a variety of professions. There is, however, a real difference between these schools and the older professional schools. The callings for which they are preparing their students are peculiarly those of public service. The majority of their graduates become college professors or instructors in secondary schools; a minority become civil servants of the nation or of the several commonwealths, or journalists, or directors of organized charities, or curators of scientific institutions, or members of some other of the new professions, numerous already and rapidly increasing, which serve a complex and progressive society — a society that is constantly developing new needs and meeting them in new ways.

1880–1890 In their relation to the preliminary general education given by the college, in the field of studies which they seek to cover, in the character and range of professions for which they prepare their students, these schools are almost precisely equivalent to the philosophical faculty of a German university. The analogy is most striking in the case of those German universities which have subdivided their philosophical faculty; for in all such divisions it is now the natural sciences, and now the political, that receive separate organization; and whenever a German faculty of political sciences is organized, it includes, like that at Columbia, the professors of public law.

In another respect these Columbia schools discharge the same function as the German philosophical faculty. Connected with the professional faculties in a university that is really a unity, that interposes no barrier to the free movement of its students across its faculty lines, these schools, like the German philosophical faculty, serve to broaden and liberalize the work of the professional schools and to inspire them with the spirit of research. Further, by encouraging new combinations of study, such schools in such a university serve not merely to develop existing sciences but to create new sciences. It was on these considerations that the organizer of the oldest of these schools laid especial stress;[1] and it was especially to secure free room for the development of legal science, as distinguished from legal technique, and of the social sciences most closely related to law, that the School of Political Science was founded.

The successive establishment of the three graduate schools has been described in the preceding chapter; it remains only to follow their development.

In accordance with the statute of June 7, 1880, the School of Political Science was opened October 4 of

[1] See preceding chapter and writings of Professor Burgess there cited.

the same year. Its teaching force consisted of Professor John W. Burgess (constitutional and international history and law), who since 1876 had been a member of the College and Law Faculties; Adjunct Professors Archibald Alexander (philosophy) and Richmond Mayo-Smith (political economy and social science), members respectively since 1877 and since 1878 of the College Faculty; and two lecturers, Munroe Smith (Roman law) and Clifford R. Bateman (administrative law), who were also appointed instructors in history in the College. Mr. Bateman's appointment, although authorized in 1880, dated from 1881, when he completed his studies at the École Libre des Sciences Politiques in Paris, and reported for duty at Columbia. Three members of the original teaching body, Mayo-Smith, Munroe Smith, and Bateman, had been pupils of Professor Burgess at Amherst College; the two latter were also graduates of the Columbia Law School. All five had studied in German universities. Until 1888 no addition was made to the permanent teaching staff; nor was there any change, except that in 1883, after the death of Mr. Bateman at the outset of a career that promised to be one of notable service to the University and to the country, Frank J. Goodnow, an alumnus of the Law School and one of the first students in the School of Political Science, was appointed lecturer in administrative law and instructor in history. In October, 1884, after a year's study in France and Germany, Mr. Goodnow entered upon the active discharge of his duties. Mr. Munroe Smith was advanced to professorial rank in 1883; Mr. Goodnow in 1887. In 1888 Edwin R. A. Seligman was promoted from a lectureship to an adjunct professorship of political economy, and for a year the Faculty included six professors; but in 1889 Professor Alexander resigned his position in the College and Political Science Faculties on the ground of ill-health. 1880–1890

1880–1890 The statute of June 7, 1880, described the new school as one "designed to prepare young men for the duties of public life." The first prospectus of the school stated that its prime aim was "the development of all the branches of the political sciences"; its secondary aim, "the preparation of young men for all the political branches of the public service." If this latter purpose could have been largely realized, a new professional school would have been established. As late as 1882, President Barnard, in his annual report, included the School of Political Science among the professional schools of Columbia.[1] In its early years it in fact resembled a professional school, in that its students were grouped in three classes and pursued a prescribed course of study for three years. The prescribed course of study, however, was necessitated by the small number of instructors. With the gradual enlargement of the Faculty after 1888, the elective principle appeared; parallel courses, the one mainly legal, the other mainly economic, were developed; the prescribed order of studies and the division into classes disappeared; and early in the second decade of the school's existence, when its Faculty had been greatly strengthened on its historical side, the system that now obtains was adopted, by which the student selects, from a considerable number of subjects, a "major" and two "minors," and, with such restrictions only as result from the character of the courses, pursues his studies in whatever order he finds most convenient.

Admission to the first-year class was based on the completion of the junior year in College, or an equivalent education. The studies of the first year were political philosophy, the literature of the political sciences, constitu-

[1] In 1886, however, Dr. Barnard dated the beginning of "the third era in the history of our College, the period of university instruction," from the establishment in 1880 of graduate instruction and of the School of Political Science, "which is not a professional school."

tional history, and political economy. This year was organized outside of the old College as a competing senior year, because the Trustees were unwilling so to extend the range of election in the College as to admit all or even the majority of these subjects into the A.B. course. Students satisfactorily completing the work of the first year received the degree of Ph.B. What the Trustees were unwilling to do all at once, they nevertheless did piecemeal: the first-year courses in the School of Political Science were gradually made senior electives in the College. As early as 1884 Columbia seniors who remained in the College and were at the same time matriculated in the School of Political Science were able to secure simultaneously the two degrees of A.B. and Ph.B. To escape from this situation it was enacted by the Trustees that the degree of A.B. might be awarded on recommendation of the Faculty of Political Science with the concurrence of the Faculty of the College — a system which remained in operation until 1893. The degree of Ph.B. was awarded on recommendation of the Faculty of Political Science as late as 1895. Since that time students who have completed the junior year, although by statute entitled to enter the school as regular students, have not been able to obtain a first degree on work in political science except by registering in Columbia College. 1880–1890

In the first years of the school, until the Law School moved into the new Library building on 49th Street, the legal lectures of the Faculty of Political Science were delivered in Great Jones Street. During these years the tuition fee in the Law School was $100; in the School of Political Science, $150. The lectures in constitutional and international law were open to the Law School students as such, because Professor Burgess was a member of the Law Faculty; the lectures in administrative law and in Roman law were open only to those Law School students who paid an additional $50.

1880–1890 The school began work in 1880 with a first-year class of eleven men. Five of these were Columbia seniors who left the College and sacrificed the degree of A.B. in order to avail themselves of the opportunities offered in the new school; four were students in the Law School; two came from other institutions and devoted themselves exclusively to work in political science. In the following years the school grew steadily but slowly. In 1883–1884 it had eighteen students not registered under any other faculty; eight students who were also College seniors but who were taking a full year's work in political science, and sixteen students who were simultaneously pursuing studies in private law — in all, forty-two. During the next six years, the fact that practically all the first-year studies in political science were made elective in the College increased the number of seniors attending courses in the school. The increase of the law tuition fee to $150 and the admission of law students to courses in political science without additional payment were followed by a considerable increase in the number of students simultaneously pursuing courses in public and in private law; and this combination was further encouraged when in 1885 the Trustees empowered the Faculty to recommend for the degree of A.M. those students who satisfactorily completed the studies of its second year. At the close of its first decade the Faculty of Political Science had made some progress in the work of convincing the students in the Law School that public law and jurisprudence constituted desirable parts of a legal education. About eighteen per cent of them were taking courses in the School of Political Science, and the total registration in that school had risen to ninety-eight.

In the task of developing an independent body of students the Faculty had been less successful. In 1890 the number studying exclusively in the School of Political Science was little greater than in 1884. The second-

ary aim of its Faculty, to create a professional school to train young men for governmental service, had not been realized; and the scepticism with which the Trustees had regarded this experiment (see above p. 227) was shown to be justified. Neither in the nation nor in the states was the civil service on such a basis that a young man, however well prepared, could enter it with the prospect of an assured and important career. 1880–1890

By 1890 several former students of the school had made their way into the service of the federal or state governments, and in the ensuing fourteen years, as may be seen by an examination of the Dean's annual reports, such appointments became more numerous. In this country, however, law is the chief avenue to political life, and the lawyers are the political class; and the Faculty of Political Science has done far more "to prepare young men for the duties of public life" by teaching the students in the Law School those things which every man in public life ought to know, but which the colleges cannot teach adequately and the schools of law, as a rule, do not teach at all, than it could have done by training an equal number of young men for departmental clerkships.

In 1890 the great majority of the graduates of the school were practising lawyers. A number of its former students had become journalists, and some of these were holding editorial positions. A larger number had become teachers. The school had already educated four men who were, or were to be, members of its Faculty, and several of its graduates were teaching in other colleges or universities. As yet, however, few students were coming to the school who intended to become teachers. This was partly due to the fact that the Faculty of Political Science was not yet fully developed on the economic side, and was practically undeveloped on the side of history. All the professors employed the historical method and offered historical courses; but

1880–1890 three of them were primarily lawyers, and the other two economists. That the school had not yet obtained its clientèle of students intending to become teachers was, however, mainly due to the fact that other universities had developed earlier than Columbia the system of attracting graduate students by fellowships. The first step taken in this direction at Columbia was the establishment in 1886 and maintenance until 1891 by Mr. Jesse Seligman of four fellowships in the School of Political Science of the value of $250 each.

During its first decade, however, the school had realized in no mean degree the "prime aim" announced in 1880: the development of the political sciences. Its officers had become known by their publications, and the doctor-dissertations of its students, though few in number (but twenty-five doctorates were awarded in the first ten years), were of high grade. The Faculty of Political Science established, for the doctor's degree, the requirements which have since been accepted by the other faculties and sanctioned by the University Council, viz.: oral examination of the candidate, at one time, in the whole field of advanced study selected by him; demonstration of his ability to read Latin, French, and German; submission of a printed dissertation, and the defence of this dissertation before the Faculty. In the first years of the school, the submission of typewritten copies was permitted; but this alternative was not encouraged, and only in two cases was the doctorate bestowed upon candidates who did not print their dissertations.

Since 1890 the best of the doctor-dissertations have been published in a series entitled *Studies in History, Economics, and Public Law*. Of these *Studies* a nineteenth volume appeared in 1904. The series has been well received and is self-supporting.

For a number of years former students of the School of Political Science and graduates of the Law School who

had pursued studies in public law maintained, with the coöperation of the Faculty, an "Academy of Political Science," in which papers were read and discussed by the members. The excellence of many of these papers, and the lack, at that time, of any suitable medium for the publication of such literature, suggested the establishment of a journal, and in March, 1886, the first number of the *Political Science Quarterly* appeared. The Academy did not long flourish in its original form; in 1897 it was reorganized on different lines, as an association of leading jurists, publicists, and economists, and it has since been chiefly active in providing public addresses at Columbia, from its own members or from other persons, on topics of contemporary interest. The *Political Science Quarterly* was recognized, from the outset, as a journal of great value, and it is at present (1904) prosperously completing its nineteenth year. 1880–1890

In connection with the Academy of Political Science the Trustees established in 1887 three prize lectureships, each of the annual value of $500 and tenable for three years, to be awarded to members of the Academy who should contribute papers of especial excellence. These prize lectureships served a useful purpose in promoting research; and so long as the Faculty itself was small, the prize lecturers, each of whom was held to deliver a course of twenty lectures, met a real need in extending the range of instruction offered in the school. These lectureships were discontinued by the Trustees in 1900.

The second decade of the School of Political Science was signalized by the establishment of much closer relations with the School of Law; by a large increase in the Faculty, particularly in the departments of economics and social science and of history; and by the formation, principally in these departments, of a large body of graduate students not primarily registered in any other faculty. Much of this advance was due to the cordial support

1890–1904 which the Faculty received from President Low — support which assumed, more often than was generally known, the form of financial assistance in the development of its work.

The lengthening of the course in the School of Law, which was put into effect in 1888 and produced a third-year class in 1890–1891; the recognition of the courses in public law and jurisprudence as elective studies for the professional degree; the growing conviction in the Law School itself that these studies were of professional as well as intrinsic value — these changes gradually increased the proportion of students pursuing a combined course in private and public law. In 1901–1902 half of the students in the Law School, and in the two following years two-thirds, were registered as attending one or more courses under the Faculty of Political Science. An increasing proportion, moreover, elected such courses as a part of their work for the professional degree, and not merely as extra or "optional" work. On the other hand, the increased intensity of the professional work has made it more difficult for the students of the Law School to engage in research work in the field of public law. In spite of the great increase, since 1890, in the number of students pursuing courses in public law and jurisprudence and the corresponding increase in the number of master's degrees conferred in this department, the number of doctorates attained by candidates in this field has remained stationary (from 1883 to 1892, nineteen; from 1893 to 1902, twenty), and an increasing proportion of the doctorates in public law has been conferred upon candidates not at any time connected with the Columbia Law School.

In the first years of its second decade the Faculty was materially strengthened: three new professors, Herbert L. Osgood (history), William A. Dunning (history and political philosophy), and John Bassett Moore (international law), were added in 1890 and 1891, and a fourth, Franklin

H. Giddings (sociology), in 1894. Mr. Dunning had been a lecturer in the school since 1888. Mr. Moore was called to Columbia from the State Department at Washington, Mr. Giddings from Bryn Mawr College. Before receiving the call to a chair at Columbia, Professor Giddings had for two years delivered lectures in the School of Political Science. The establishment of a full professorship of sociology was made possible by the liberality of President Low. These additions, which nearly doubled the teaching force; the simultaneous establishment of twenty-four university fellowships, a third of which were regularly conferred in political science; and the reciprocity arrangements established with the theological seminaries of the city and its environs, were followed by an increase in the separate ("primarily registered") student body from twenty-four in 1890–1891 to ninety-four in 1894–1895. 1890–1904

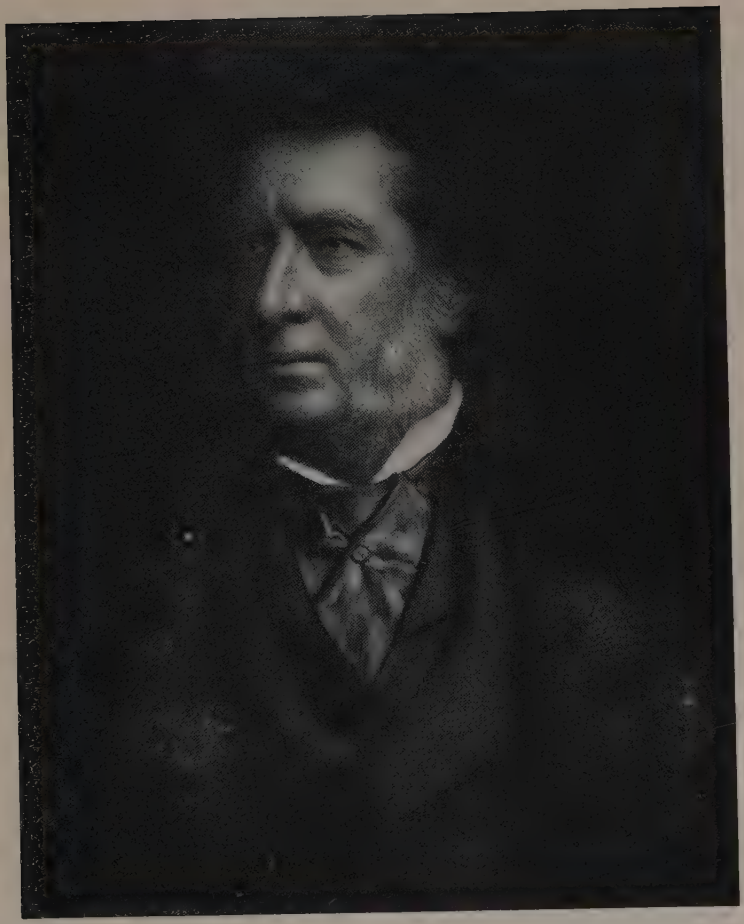
The establishment of a separate chair of sociology enabled the department of economics and social science to put largely into operation plans devised by Professor Mayo-Smith and submitted to the Trustees by President Low, January 8, 1894. Not only was the historical and theoretical instruction in social science greatly extended, and a statistical laboratory established, but "field work" was also initiated in coöperation with the charitable institutions of the city. "The city," Professor Mayo-Smith declared, "is the natural laboratory of social science, just as the hospitals are of medical science"; and the relations which the department has been able to establish with the Charity Organization Society, the Brooklyn Bureau of Charities, the State Charities Aid Association, the University Settlement Society, and the East Side House give its instructors and its students unsurpassed opportunities for practical work and for scientific investigation.

On December 4, 1893, the Trustees adopted the following resolution: —

1890–1904 "That, in commemoration of the long and intimate relations of Mr. Fish with the College, and in recognition of his distinguished services in the conduct of international affairs in the settlement of many grave controversies arising during his term of office as Secretary of State, the chair of International Law and Diplomacy in Columbia College shall hereafter be known as the Hamilton Fish Chair of International Law and Diplomacy."

Meantime the reorganization of the University in 1890–1892 had created two other graduate schools, each under the charge of a distinct faculty, had provided that each of the Faculties should elect its own Dean and Secretary, and had established a central representative body, the University Council, with especial authority over the non-professional courses and degrees. All that the Faculty of Political Science had to do to accommodate itself to the new order was to elect as Dean its organizer and senior professor, and to submit for approval by the Council its regulations for the higher degrees. Professor Mayo-Smith was its first delegate to the University Council.

The Faculty of Philosophy met for organization May 9, 1890. It consisted, at the outset, of ten professors and adjunct professors: Henry Drisler (Greek), Charles Sprague Smith (Romance languages), Augustus C. Merriam (Greek), Thomas R. Price (English), Hjalmar H. Boyesen (Germanic languages), John D. Quackenbos (English), Richard J. H. Gottheil (Semitic languages), Harry Thurston Peck (Latin), Nicholas Murray Butler (philosophy, psychology, and ethics), and William H. Carpenter (Germanic languages). All these were members of the Faculty of Arts (College), but so rapid had been the growth of Columbia that only one of the ten had been a member of its professorial corps for more than ten years. The new Faculty was a young faculty, in age as well as in service, and it organized itself by electing



HAMILTON FISH, LL.D. (COLUMBIA, HARVARD, AND ELSEWHERE)
Chairman of the Trustees, 1859–1893

one of its youngest members, Professor Butler, as its Dean, and another, Professor Peck, as its delegate to the Council. In the following five years this Faculty lost half of its original membership. Professors Drisler and Quackenbos were emerited; Professor Sprague Smith resigned; and Professors Merriam and Boyesen were removed by death in the fulness of their powers. In 1895, however, all the other officers associated with the school at the time of its organization, James McKeen Cattell (psychology), Bernard F. O'Connor (Romance languages), Edward D. Perry (Greek), A. V. W. Jackson (Indo-Iranian and English), and James H. Hyslop (logic and ethics), had been promoted to professorial rank, and all these except Professor O'Connor (resigned 1894) were still members of the Faculty. New members had also been appointed as follows: Adolphe Cohn (Romance languages) and George E. Woodberry (literature) in 1891; Brander Matthews (literature) in 1892; Henry A. Todd (Romance philology) and George R. Carpenter (rhetoric) in 1893; James R. Wheeler (Greek) and James C. Egbert (Latin) in 1895. 1890–1904

In 1890 this Faculty was almost exclusively a faculty of philology and letters, nine of its ten members belonging to this group. Its present division of education, with eight professors, and its division of philosophy, psychology, and anthropology, which at present (1904) includes two departments and eight professors, were represented in 1890 by Professor Butler. In 1895 there were two additional professors in the department of philosophy and psychology, but nine other professors had been appointed in the various departments of languages and literatures.

From the beginning the professional side of the work of this Faculty, the training of teachers, was strongly developed. This result was largely furthered by the alliance with Teachers College, contracted in 1893 and consolidated in 1898. The relations between the School of Philosophy and

1890–1904 Teachers College are in many respects analogous to those which have been established between the School of Political Science and the Law School; although, owing partly to historical reasons, the professional connections of the younger Faculty were established more easily and have become more intimate than those of the School of Political Science. In each case the non-professional Faculty has coöperated with the professional in the work of instruction, and has simultaneously leavened it with the research spirit. Doctorates in philosophy, psychology, and education preponderated during the first decade of the School of Philosophy, as did doctorates in public law during the first decade of the School of Political Science.

Until the removal of both institutions to Morningside Heights, the alliance with Teachers College had little influence on the growth of the student body in the School of Philosophy. This school, however, enjoyed from its establishment the advantage of the university fellowship system; it drew students from the theological seminaries; and with its large teaching force and wide range of subjects it attracted from the outset a considerable body of students. In the year preceding the organization of the Faculty of Philosophy, 35 graduate students were registered under the Faculty of Arts (College). In its first year the School of Philosophy had a total enrolment of 92 students, 32 of whom were seniors in Columbia College, five[1] were graduate students primarily registered under other faculties, 47 were graduate students, and eight were special students primarily registered under the Faculty of Philosophy. Of the 47 graduate students primarily registered in this school, 23 held the master's degree and three the doctor's degree. Four years later (1894–1895) the total enrolment was 190: 51 seniors, 27[1] graduates

[1] Approximate figures. The early reports from the Faculty of Philosophy show the number of graduates in the school, but the primary and secondary registrations were not separated.

primarily registered elsewhere, 93 graduates and 19 special students primarily registered in this school. 1890–1904

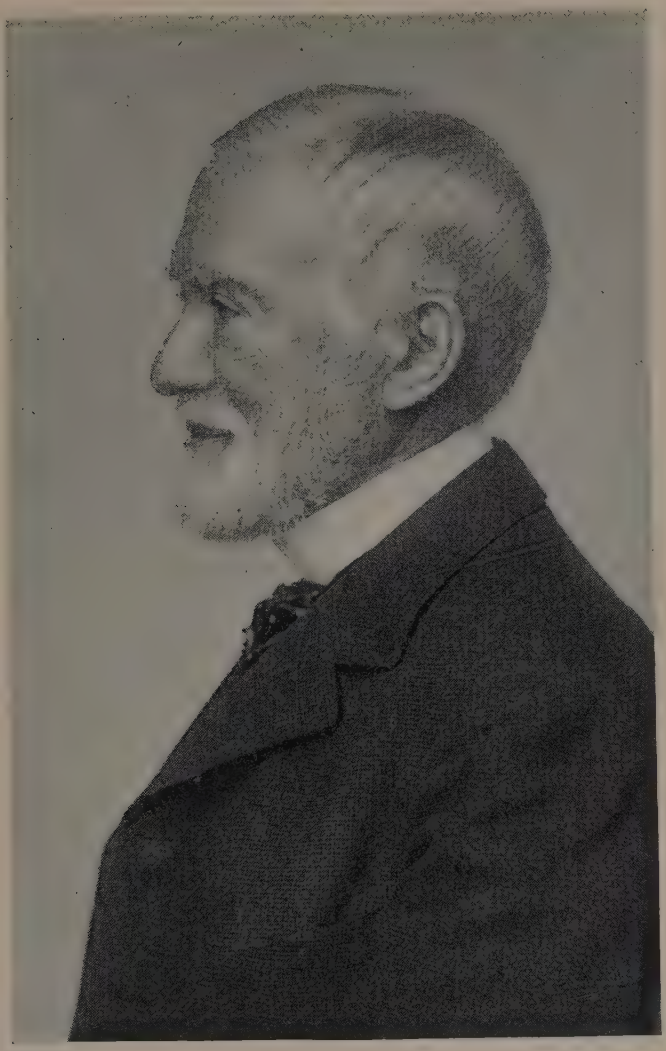
The prime purpose of the School of Philosophy, as of the other graduate schools, has been, from the outset, the promotion of research. In its first decade (1891–1900) the Faculty of Philosophy graduated 54 doctors, 23 of whom had their major subjects in the department of philosophy, psychology, and education. Professor Butler's *Educational Review*, which first appeared in 1890, promptly attained the highest rank among publications in this field. Members of the Faculty have established and maintain seven series: *Contributions to Philosophy, Psychology, and Education*, since 1894; *Studies in Comparative Literature* and *Germanic Studies*, since 1899; *Studies in English, Indo-Iranian Series*, and *Studies in Romance Philology and Literature*, since 1900; *Studies in Classical Philology* and *Oriental Studies*, since 1902.

In the general reorganization of the University in 1890, advanced instruction and research training in mathematics and the natural sciences were assigned to the Faculty of the School of Mines, later designated as the Faculty of Applied Science. In 1890–1891 nine students holding the A.B. degree or its equivalent were registered under this Faculty as candidates for the higher degrees. In 1891–1892 the number had risen to fifteen. In 1892 the School of Pure Science was established and placed in charge of a distinct faculty. The original Faculty of Pure Science consisted of thirteen professors and adjunct professors, representing ten departments; viz., mathematics, physics, mechanics, astronomy, geology, mineralogy, chemistry, botany, biology, and physiology. Its members were: J. H. Van Amringe, Thomas Egleston, Charles F. Chandler, Ogden N. Rood, John G. Curtis, John K. Rees, Nathaniel L. Britton, Alfred J. Moses, James F. Kemp, Henry F. Osborn, Edmund B. Wilson, Michael I. Pupin, and Wil-

1890–1904 liam Hallock. All these were members of the School of Mines Faculty, except Professor Curtis (physiology), who was a member of the Faculty of Medicine, and Professors Osborn and Wilson (biology), who had been appointed officers of the University during the previous year.

The Faculty of Pure Science met for organization September 30, 1892. It elected Professor Osborn as its Dean, and Professor Rees as its delegate to the University Council. In this Faculty the line of cleavage between the older and the younger group was very marked. Four of the thirteen had been in the service of Columbia for nearly thirty years, and two for more than ten years, while the appointments of the remaining seven to professorial rank at Columbia dated from the preceding two years, 1890–1892. All but three of the thirteen are still (1904) members of the Faculty. Professor Britton resigned in 1896 to become director of the New York Botanical Garden, and was made professor emeritus — a change which in no wise interrupted his connection with the research work conducted by the department of botany. Professor Egleston was emerited in 1897 and died in 1900. Professor Rood died in 1902.

The purpose for which this Faculty was established, as President Low stated in his report of 1893, was to encourage scientific research. For this purpose it was deemed advisable to unify the research interests of the different schools in the field of natural science. Naturally, therefore, as new research interests in this field were developed in the professional schools, the departments concerned obtained representation in the Faculty of Pure Science ; and new appointments in the field, whether in existing or in new departments, were in many cases made simultaneously in the Faculty of Pure Science and in the Faculties of Medicine or of Applied Science. Under these circumstances the Faculty of Pure Science grew rapidly in numbers. Within four years seats in Pure



WILLIAM C. SCHERMERHORN, A.M. (COLUMBIA)
Chairman of the Trustees, 1893–1903

Science were assigned to three more medical professors, George S. Huntington (anatomy), T. Mitchell Prudden (pathology), and Frederic S. Lee (physiology); seats in Pure and Applied Science to R. S. Woodward (mechanics), Harold Jacoby (astronomy), Bashford Dean (zoölogy), and Lucien M. Underwood (botany); and seats in Pure Science and in an undergraduate Faculty to Thomas S. Fiske (mathematics) and Frank N. Cole (mathematics). Following the inclusion of the departments of anatomy, physiology, and bacteriology, the titles of Professors Osborn and Wilson were changed from professors of "biology" to professors of "zoölogy," "biology" becoming a divisional appellation. In the report already cited President Low said: "In connection with the School of Pure Science there has been no attempt made to define the point at which pure science stops and applied science begins;" but the engineering departments and those of metallurgy and mining were not represented in the earlier organization of this Faculty. Professor Osborn resigned the Deanship in 1895, and Professor Woodward was elected as his successor. 1890–1904

In 1892–1893 the School of Pure Science had a total enrolment of 59 students: 37 College seniors, three graduates primarily registered in other schools, and 13 graduates and six special students primarily under its jurisdiction. In its third year, 1894–1895, the number of graduates primarily registered in the school was 26; 12 undergraduates in the Schools of Medicine and of Applied Science were pursuing some of its courses; the number of College seniors had decreased to 14, and the total enrolment was 66. The development of this school was retarded by the fact that for some years scientific first degrees were not accepted by the University Council as a basis for candidacy for the higher degrees.

As the School of Political Science is related to the School of Law and the School of Philosophy to Teachers

1890–1904 College, and both to the theological seminaries, so, in a general way, is the School of Pure Science related to the Schools of Applied Science and of Medicine. These are its professional allies, and in these it fosters wider interests and stimulates research. In the Schools of Applied Science, however, graduate work had been prosecuted and the degree of Ph.D. had been granted even before 1880. After the Faculty of Pure Science was organized, graduate work in the various branches of engineering and in metallurgy and mining was still conducted by professors in the Faculty of Applied Science, and candidates who specialized in these branches were recommended for the doctorate by that Faculty.[1]

In the first decade of its separate existence (1893–1902) the Faculty of Pure Science promoted sixty-nine candidates to the doctorate. The fruits of active research appeared also in its publications. At the present time (1904) it maintains eight series of scientific studies: *The Biological Series*, *Contributions from the Geological Department*, *Contributions from the Department of Mineralogy*, *Contributions from the Observatory*, since 1892; *Contributions from the Havemeyer Laboratories*, since 1898; and three sets of botanical *Memoirs* and *Contributions*, the last established in 1895, besides a journal, the *Bulletin of the Torrey Botanical Club*, founded in 1901. This list does not include the scientific publications which are under the direction primarily of members of the Faculties of Applied Science and of Medicine.

The research work of the Faculty of Pure Science is greatly facilitated and enlarged by the relations (described

[1] Prior to 1880, 16 candidates received the degree of Ph.D. on recommendation of the Faculty of Applied Science (Mines). From 1880 to 1892, inclusive, the number was 28; from 1893 to 1904, 21. Until 1890 the Faculty recommended directly to the Trustees; after 1890 it recommended through the University Council. After the present year (1904) recommendations for the doctor's degree in engineering, metallurgy, and mining will be made by the Faculty of Pure Science (see below).

in the preceding chapter) which the University has established with the New York Botanical Garden and with the American Museum of Natural History in New York. "The facilities thus afforded," Dean Woodward writes, "for studies in botany, geology, and palæontology are unsurpassed. In the mathematico-physical sciences also there is a similar coöperation between our departments of mathematics, mechanics, and physics and the American Mathematical Society and the American Physical Society, which meet regularly at Columbia during the academic year." 1890–1904

By far the most interesting question which has thus far arisen in the development of the graduate schools has been that of the admission of women. The earlier arrangements made at Columbia or under its auspices for the higher education of women, first in the so-called "collegiate course for women" (1883), and then in Barnard College, established as an independent institution in 1889, are described in the preceding chapter. The "collegiate course" was a system of examination without instruction. In Barnard College separate instruction was given to women. Neither arrangement involved coeducation.

The first difficulties in the working of these arrangements arose in connection with senior and graduate study, particularly after 1890, when the range of election in the senior year of the Columbia School of Arts (College) was greatly widened. No women had been registered in the "collegiate course" since 1889, but those who had been registered prior to that date were permitted to proceed as candidates for the degrees of A.B., A.M., and Ph.D. These women found increasing difficulty in passing examinations upon lecture courses which they could not attend. In Barnard College instruction was provided chiefly by duplication, the same courses being delivered, largely by the same instructors, at Columbia and at Barnard. It was evident, even before Barnard College

1890–1904 had a senior class, that it would be difficult to extend this system into the senior year, to say nothing of the graduate years. Assuming that the professors were willing to repeat their lectures (which was not true in all cases), Barnard College was not at that time able to pay for the duplication of so considerable a number of lecture courses, even at the customary lower rate. At the same time, Barnard College, under the sanction of the Columbia authorities, was promising to women a curriculum equivalent to that of Columbia; and the only way in which it could make that promise good was by securing the admission of its senior and graduate students to the courses delivered at Columbia.

In his first report as Dean of the Faculty of Philosophy Professor Butler recommended that "auditors" be admitted to university courses of instruction. Before the close of the academic year (1890–1891) the Trustees passed a statute providing that any course in the Faculties of Political Science or Philosophy might be opened to "auditors" by authorization of the President with the consent of the professor concerned. Before the opening of the next academic year, each professor in these Faculties was informed, in a circular letter from the President, that women might be admitted as auditors. In 1891 a majority of the courses in the Faculty of Philosophy were thus opened to women. The problem, however, was not yet solved, even as regarded this Faculty. Under the statutes auditors were distinguished from regular students; they paid a fee one-third larger, and they were not candidates for a degree. This legal difficulty was met in a thoroughly judicial way by a distinction. All women properly qualified and registered as candidates for a degree at Barnard College were regular students in that College. They paid to Barnard College the regular fees for instruction. For every such woman the Barnard corporation paid to the Columbia corporation the auditor's fee. The women

thus provided for attended lectures at Columbia as auditors, were examined as Barnard students, and received degrees on the recommendation of the Barnard College Faculty. 1890–1904

At a meeting of the Faculty of Political Science in December, 1891, it was unanimously resolved that it was not desirable that any lectures should be opened to auditors without the authorization of the Faculty. Regarding the expediency of admitting qualified women students, the Faculty, which at the time consisted of eight members, was divided in opinion; but this question was not presented. The majority of the Faculty was opposed to opening university lectures to the general public, fearing that popular audiences would tend to elicit popular lectures; and the Faculty was unanimously of the opinion that so important a question of university policy as that of coeducation should not be decided by the action of the President and of individual professors.

The statute authorizing the admission of auditors was not extended to apply to the School of Pure Science when that school was established in 1892. For several years, accordingly, women were not admitted to the senior or graduate courses conducted by the Faculties of Political Science and Pure Science. In 1895 the question of university coeducation was for the first time brought before the University Council. A motion was introduced that the Council should recommend that the courses conducted by the Faculties of Political Science and Pure Science in history, political economy, and mathematics (the subjects most needed by the senior and graduate students of Barnard College) should be opened to auditors. This motion, after full debate, was defeated.

Shortly afterwards it was announced that a friend of Barnard College was prepared to establish in Columbia University, and to maintain for a term of years, three new professorships, — one in history, one in economics, and one

1890-1904 in mathematics,—on the understanding that each of these departments should offer a corresponding amount of separate instruction to Barnard seniors and graduates; and that the Barnard corporation would endeavor to maintain these professorships after the expiration of such term. This proposal was approved by the University Council and accepted by the Columbia Trustees. Professor James Harvey Robinson of the University of Pennsylvania and Professor John Bates Clark of Smith College were appointed to chairs respectively of history and of political economy in the Faculties of Political Science and of Barnard College; and Professor Frank N. Cole of the University of Michigan was appointed professor of mathematics in the Faculties of Pure Science and of Barnard College. It was arranged that these professors should lecture at Columbia as well as at Barnard, and that for every course given by them at Columbia, a course should be given at Barnard by their departmental associates. By this arrangement the Columbia Faculties were strengthened, and the Barnard students obtained instruction not only from the newly appointed professors, but from several of their colleagues. Two years later it became known that the friend who had come to Barnard's assistance at this critical moment was President Low.

In 1897, the necessary authorization having been granted by the Trustees, thirty-seven courses in Pure Science were opened to auditors. In 1898 the Faculty of Political Science decided to open to women holding a first degree all purely graduate courses in history and economics, a purely graduate course signifying one that was not open to seniors in Columbia College. The number of courses thus opened has increased with the subsequent development of the school. In 1904 the list comprised twelve courses in history and fifteen courses in political economy and social science.

When Barnard College was by formal agreement "in-

GEORGE L. RIVES, A.M. (CANTAB.)
Chairman of the Trustees, 1904

corporated in the educational system of the University," it was provided that women holding a first degree should be admitted to graduate courses as regular students of the University. The fifth and sixth sections of the agreement of January 19, 1900, read : — 1890–1904

"On and after July 1, 1904, all of the instruction for women leading to the degree of bachelor of arts shall be given separately in Barnard College, except that courses open to seniors of Columbia College which are counted towards a Teachers College diploma shall continue to be open to seniors in Barnard College. Barnard College will assume as rapidly as possible all of the instruction for women in the senior year, other than the courses leading towards a Teachers College diploma, without regard to the time limit contained in this section, and undertakes to maintain every professorship established at its instance, as hereinbefore provided, so long as the services of the incumbent thereof or an equivalent therefor shall be rendered in Barnard College; and when Barnard College has adequately provided for its undergraduate work, it will, as its means allow, establish additional professorships in the University, upon foundations providing for courses which shall be open to men and women, to the end that opportunities for higher education may be enlarged for both men and women.

"The University will accept women who have taken their first degree on the same terms as men, as students of the University, and as candidates for the degrees of master of arts and doctor of philosophy under the Faculties of Philosophy, Political Science, and Pure Science, in such courses as have been or may be designated by these Faculties, with the consent of those delivering the courses, and will make suitable provision for the oversight of such women."

Under this agreement, women holding a first degree ceased to be registered as students in Barnard College.

In this same year (1900) two additional professorships were established in Columbia University upon Barnard College foundations. Professor William P. Trent of the University of the South was appointed professor of Eng-

1890–1904 lish literature, and Mortimer L. Earle, lecturer in Greek, was promoted to be professor of classical philology. To both were assigned seats in the Faculty of Philosophy.

In 1891–1892, when courses in the Faculty of Philosophy were first opened to women, six women holding the first degree were admitted. In 1899–1900 the number had risen to 82, and in 1904 it was 131. In the latter year nearly 33 per cent of the students primarily registered as candidates for the higher degrees, and more than 33 per cent of all the students enrolled were women. "On the whole," the Dean of the Faculty of Philosophy writes, "the results of admitting women have been good. Some of the best students have been women. Few of them proceed to the degree of Ph.D., but these few take the degree with high standing."

The proportion of women enrolled in the other graduate schools has not been so large. In 1903–1904 14 per cent of the students primarily registered in the School of Political Science as candidates for the higher degrees, and 10 per cent of all the students enrolled were women. In the same year the corresponding percentages in the School of Pure Science were 19 and 22.

The number of real auditors, as distinguished from regular and special students, has not at any time been considerable in any of the graduate schools. Nearly all have been registered in the School of Philosophy, particularly in the department of English; but even here the number has not exceeded twenty-eight in any recent year. The fear that the admission of auditors would tend to popularize the university lectures has, under these circumstances, proved groundless; and when the admission of auditors ceased to imply the admission of female auditors, the Faculty of Political Science voted that any of its courses might be opened to male auditors.

The policy of the several graduate schools regarding the admission of non-graduate or special students has

varied greatly. The relations which the Faculty of Political Science maintains with the Law School have given to the School of Political Science a large body of such students, particularly since 1891, when its courses in public law were made elective for the professional degree. In consequence of the requirement since 1903 of a first degree for admission to the Law School, these non-graduate students will have disappeared by 1905. Other special students were never numerous, and since the adoption of stricter rules in 1900 there have been very few. Until 1899 the School of Pure Science freely admitted non-graduate students from the Schools of Medicine and of Applied Science; in 1897–1898 it had on its rolls thirty-four such students, besides forty other special students. Since 1899 it has followed the policy of excluding non-graduate students. The School of Philosophy admitted special students in increasing numbers until 1900, when its registration included sixty-two non-graduates. Many of these were students in the department of music, which was connected with the School of Philosophy from 1896 until 1902. At present, as the Dean of the Faculty writes, "only very unusual qualifications suffice to gain the privilege of admission as a special student." 1890–1904

Among other problems which have arisen in the development of the graduate schools, the conditions upon which the degree of Ph.D. should be awarded have been most debated. The statute of 1880, by which the School of Political Science was established, provided that young men who had completed three years of collegiate study should be admitted as regular students, and that such students might be recommended for the doctor's degree after three additional years of residence. A statute of 1882 provided that the doctor's degree might be conferred after two years of study in the graduate department of the College. The statutes of 1890 and 1892, by which the Schools of Philosophy and of Pure Science were

1890–1904 established, made the qualification for admission to these schools the completion of the third year of a college course. The University Council, invested with full power to determine the conditions on which the higher degrees should be awarded, accepted these precedents and fixed the minimum period of graduate study for the doctor's degree at two years. As a matter of experience, however, it has been found that a longer period of study is usually necessary. The cases in which the degree of Ph.D. has been obtained in the minimum period have been very rare; the average period has been considerably in excess of three years. Under these circumstances there has been a demand that the minimum period of study for the doctorate after the attainment of the first degree should be raised to three years; but the University Council has thus far declined to make this change.

The question is closely associated with the problem of shortening the aggregate term of college and university study. All the legislation above noted presupposes that the fourth year of the College is really a university year, and that study for the doctor's degree may begin in that year; and the Council has not been prepared to say that a student of exceptional ability and industry, who has pursued a coherent course of advanced study from the beginning of the senior year and has submitted a satisfactory dissertation shall not be permitted to obtain the doctorate within the present minimum term.

The requirement that a candidate for the doctorate should be able to read Latin, as well as French and German, has been abolished as regards the Faculty of Pure Science, and it is waived as regards candidates in psychology, anthropology, and education when the professor in charge of their major subject certifies that knowledge of Latin is not necessary for the prosecution of their researches.

The Faculties of Philosophy and of Pure Science adhere

to the practice of the German universities in that no candidate is admitted to examination for the doctorate until an approved dissertation has been submitted. The Faculty of Political Science admits the candidate to examination in his chosen field of study before his dissertation is submitted, in order that he may not be urged into hasty publication before his investigations are completed and his conclusions matured. The result of this practice is that many candidates do not submit completed dissertations until a year or more after the termination of academic residence. In not a few cases the candidate, growing more critical of his own work, never completes a dissertation. It is the belief of the Faculty of Political Science that under this system the completed and printed dissertations are much more valuable than they would have been had the candidates been urged to earlier publication. 1890–1904

In these and in other minor matters the University Council has wisely refrained from enforcing upon the several Faculties a uniform practice. In the present stage of University education it seems expedient that different methods should be tried until their relative worth is at least approximately determined.

In 1902 the University Council established a committee on higher degrees, consisting of the representatives of the Faculties of Political Science, Philosophy, and Pure Science, and delegated to this committee a large part of its authority in matters relating to advanced non-professional study. This change has enabled the Council to devote more attention to those broader questions which concern the entire University; while the committee on higher degrees, meeting more frequently, is able to deal more promptly with questions which concern the graduate schools alone.

The nine years from 1896 to 1904 inclusive were marked by a further enlargement of the three non-professional

1896–1904 Faculties and a rapid increase in the number of their graduate students.

Reënforced in 1895 by the appointments on Barnard foundations already noted, the Faculty of Political Science was further strengthened, in 1896, by the appointment of Professor William Milligan Sloane of Princeton University, an alumnus of the old Columbia, to a newly established chair of history, which, in recognition of the President's services to the University, was described as the Seth Low professorship. In 1901 the Faculty lost, by the second death in its ranks, another of its original members, Professor Mayo-Smith. At the time of his death, the department which he had built up was recognized as the strongest economic department in the country, and the number of graduate students in economics was many times greater at Columbia than at any other American university. In his stead, Professor Henry R. Seager was called from the University of Pennsylvania and Professor Henry L. Moore from Smith College.

It is interesting to note that this Faculty, in its brief history of twenty-four years, has grown, like the College on which it was grafted, first from within, by reproduction, and then from without, by annexation. All the additions to the original teaching force, until 1891, were drawn from the graduates of the school; all reënforcements since that date have been drawn from outside, from the government service or from other colleges and universities. The earlier policy made the Faculty singularly homogeneous; the later policy has kept it from becoming clannish.

The opportunities for advanced study and research in history have been widened during the last few years by arrangements with members of the Faculty of Philosophy. Professors Gottheil, Jackson, Prince, and Hirth were invited and cordially agreed to deliver courses on the history of the Arabs, of India and Persia, of western

Asia and Egypt, and of China. In connection with courses on Greek and Roman history delivered in the School of Political Science, these Oriental history courses enabled the Faculty, with the consent of the University Council, to announce that ancient history would be recognized as a major or minor subject for the master's and doctor's degrees. 1896–1904

In 1894 the fruits of the fellowship system began to appear. In his report of that year Dean Burgess, for the first time, called attention to educational appointments conferred on recent graduates of the school: five professorships, an instructorship, and one lectureship. From that date, annual or biennial lists of such appointments became a permanent feature in the Dean's reports; and as the lists lengthened, they became also a topic of comment in the President's reports. The effect upon the student body showed itself clearly in 1900, when the primary registration in the school (men only) rose to 132. From 1890 to 1894 inclusive the average primary registration[1] was 28; from 1895 to 1899 inclusive, it was 81. In 1903 both primary registration and total enrolment reached their highest point: 157 and 523.

The growth of the Faculty and of the School of Philosophy has been even more rapid, especially since this school and Teachers College became neighbors. Since 1895,[2] besides the two appointments on Barnard foundations already noted, seats in the Faculty have been assigned to eight Teachers College professors: James E. Russell (education), Frank M. McMurry (theory and practice of teaching), Paul Monroe (history of education), Samuel T. Dutton (school administration), Julius Sachs (secondary education), Franklin T. Baker (English), Gonzalez Lodge (Latin and Greek), and Edward L.

[1] Approximate figures.

[2] To July 1, 1904. Changes taking effect after July 1, 1904, are not here noted.

1896–1904 Thorndike (psychology). During the same period seven professors have been appointed to chairs in this Faculty and in an undergraduate Faculty: Calvin Thomas (German), Carlo L. Speranza (Italian), Nelson G. McCrea (Latin), Clarence H. Young (Greek), Livingston Farrand (anthropology), Frederick J. E. Woodbridge (philosophy), and Charles Knapp (classical philology); and six professors have been added to the Faculty of Philosophy exclusively: Franz Boas (anthropology), John D. Prince (Semitic languages), Friedrich Hirth (Chinese), Felix Adler (ethics), Charles A. Strong (psychology), and Marshall H. Saville (American archæology). Edward A. MacDowell (music) was a member of the Faculty from his appointment in 1896 until his department was set off from the School of Philosophy in 1902. Between 1896 and 1904 the Faculty lost two other members: one, James H. Hyslop, by resignation; the other, Thomas Randolph Price, by death.

In 1902, when Dean Butler became President of the University, Professor Perry was elected as Dean of the Faculty of Philosophy.

From 1896 to 1904 inclusive, the total registration in the School of Philosophy rose from 227 (including College seniors) to 495 (exclusive of undergraduates); and the primary registration from 130 to 431. In the total and primary registration for 1904 were included 100 students primarily registered in Teachers College who were candidates for the higher degrees under the Faculty of Philosophy, and 21 auditors.

The Faculty and School of Pure Science also owe a portion of their recent growth to the neighboring federated colleges. The appointment of one professor on a Barnard foundation has already been noted. More recently seats in the Faculty of Pure Science have been assigned to four Teachers College professors: John F. Woodhull (physical science), Richard E. Dodge (geography), Francis E.

Lloyd (biology), and David E. Smith (mathematics). Since 1900 seats in the Faculties of Pure and Applied Science have been assigned to James Maclay and Cassius J. Keyser (mathematics), Edmund H. Miller, Marston T. Bogert and J. L. R. Morgan (chemistry), and Amadeus W. Grabau (geology); in Pure Science and in the Barnard College Faculty to Henry E. Crampton (zoölogy). Further representation has been given to the Medical School by adding to the Faculty of Pure Science William J. Gies (physiological chemistry) and Philip H. Hiss (bacteriology). Additions have been made to this Faculty exclusively by the appointments of Ernest F. Nichols (experimental physics) and Gary N. Calkins (zoölogy). 1896–1904

A further enlargement of this Faculty is in prospect. During the year 1903–1904 the Faculties of Applied Science and of Pure Science unanimously resolved to recommend to the Trustees that all graduate work in science for the higher degrees should be conducted under the direction of the Faculty of Pure Science. This involves the assignment of seats in the latter Faculty to the heads of the departments of civil and sanitary engineering, electrical engineering, mechanical engineering, mining, and metallurgy. The change is one which Dean Woodward has long sought to accomplish. "The terms 'applied science' and 'pure science,'" he writes, "inevitably suggested invidious distinctions. Applied science must have its research side; otherwise it ceases to be progressive. The Faculty of Mines and its successor, the Faculty of Applied Science, have had authority to conduct work for the higher degrees. That work has been intimately connected with the work of the Faculty of Pure Science. Time has fortunately removed objections to a unification of the graduate work of the two Faculties."

The student body in Pure Science grew steadily during the years 1896–1904. After 1896, by resolution of the University Council, students holding scientific first degrees

1896–1904 were admitted as candidates for the higher degrees. In the year preceding this legislation, 1895–1896, the number of graduates primarily registered in pure science was 28, and the total enrolment was 85. In the following years there was a gradual increase in the number of graduates primarily registered in this school, and also in the number of graduates primarily registered in Medicine and Applied Science who were enrolled under the Faculty of Pure Science as candidates for the higher degrees. The number of graduates primarily registered rose from 28 in 1895–1896 to 65 in 1899–1900 and 102 in 1903–1904. The total number of graduates registered rose from 36 in 1895–1896 to 156 in 1903–1904.

The fact that the graduate schools have begun to receive endowments from gifts and bequests is at once an indication of the success which they have achieved and a warrant of their further development. In 1898 the Chamber of Commerce of the State of New York raised by public subscription the sum of $100,000, to perpetuate the memory of George E. Waring. The income of this fund, primarily destined to the use of Colonel Waring's widow and daughter, is ultimately to be devoted to "instruction in municipal affairs." In 1901 an "anonymous friend" gave $213,000 to found a department of Chinese languages, literatures, religion, and law, and especially for the establishment of a professorship to be known as the Dean Lung professorship of Chinese. In 1903 Joseph F. Loubat gave $100,000 to establish the Loubat professorship in American archæology. In the same year a legacy of $100,000 was received from the late Dorman B. Eaton to endow and maintain a professorship of municipal science and administration.

The following fellowships have been established by gift or bequest: the George William Curtis fellowship in political science; the Schiff fellowship in political science; the Tyndall fellowship for the encouragement of research

in physics; the Barnard fellowship for encouraging scientific research; the Drisler fellowship in classical philology; the Proudfit fellowship in letters; and the Carl Schurz fellowship for the study of the German language and literature. 1880–1904

The growth of the three Faculties, not only in the number of professors but in the range of subjects represented, is shown in the following tables: —

FACULTY OF POLITICAL SCIENCE

Groups	1880–1881		1903–1904	
	Professorial Titles	Number of Professors	Professorial Titles	Number of Professors
1. History and Political Philosophy.	Philosophy.	1	History and Political Philosophy (1), History (3).	4
	History, Political Science, and International Law.	1		
2. Public Law and Comparative Jurisprudence.	—[1]		Political Science and Constitutional Law (1), Roman Law and Comparative Jurisprudence (1), Administrative Law and Municipal Science (1), International Law and Diplomacy (1).	4
3. Economics and Social Science.	Political Economy and Social Science.	1	Political Economy and Finance (1), Sociology (1), Political Economy (3).	5
Total Number of Professors . .		3		13

[1] Chairs of Roman Law and of Administrative Law were established in 1880, but were occupied by "lecturers."

FACULTY OF PHILOSOPHY

Divisions	1890–1891		1903–1904[1]	
	Professorial Titles	Number of Professors	Professorial Titles	Number of Professors
1. Classical Philology.	Greek (2), Latin (1).	3	Classical Philology (2), Greek and Latin (1), Greek (3), Latin (3).	9
2. Oriental Languages.	Semitic. —[2]	1	Semitic (2), Indo-Iranian (1), Chinese (1).	4
3. Modern Languages and Literatures.	Germanic Languages (2), Romance Languages (1), English (2).	5	Germanic Languages (2), Romance Languages (3), English Language and Literature (3), Dramatic Literature (1), Comparative Literature (1).	10
4. Philosophy, Psychology and Anthropology.	Philosophy, Psychology, and Ethics.	1	Philosophy (1), Psychology (3), Social Ethics (1), Anthropology (2), American Archæology (1).	8
5. Education.			Education (3), Theory and Practice of Teaching (1), School Administration (1), [exclusive of 3 included in Divisions 1 and 3.]	5
Total number of Professors . .		10		36

[1] Appointments of 1904 are not included.

[2] Instruction in Indo-Iranian was given, 1890–1891, but no chair was established until the end of the academic year.

FACULTY OF PURE SCIENCE

Divisions	1892–1893		1903–1904[1]	
	Professorial Titles	Number of Professors	Professorial Titles	Number of Professors
1. Biology.	Biology (2), Physiology (1), Botany (1).	4	Biology (1), Zoölogy (5), Anatomy (1), Physiology (5), Pathology (1), Bacteriology (1), Botany (1).	12
2. Chemistry.	Chemistry.	1	Chemistry (1), Analytical Chemistry (1), Organic Chemistry (1), Physical Chemistry (1), Physiological Chemistry (1).	5
3. Geology, Geography and Mineralogy.	Geology (1), Mineralogy (2).	3	Geology (1), Mineralogy (1), Palæontology (1), Geography (1).	4
4. Mathematics and Physical Science.	Mathematics (1), Physics (2), Astronomy (1), Mechanics (1).	5	Mathematics (6), Physics (3), Astronomy (2), Mechanics (1), Electromechanics (1).	13
Total number of Professors		13		34

[1] Appointments of 1904 are not included.

1890–1904 Doctorates have been awarded on the recommendation of the several Faculties, as follows : —

Years	Political Science	Philosophy	Pure Science
1880–1892	31		
1890–1892		5	
1892–1893	7	2	3
1893–1894	3	5	3
1894–1895	4	4	6
1895–1896	2	5	3
1896–1897	10	2	4
1897–1898	5	9	8
1898–1899	6	14	14
1899–1900	3	9	9
1900–1901	8	9	8
1901–1902	7	12	11
1902–1903	10	17	10
1903–1904	10	9	8
Totals	106	102	87

The enrolment of students in the three schools, since the system of "primary registration" was introduced, has been as follows : —

School	1895 to 1896	1896 to 1897	1897 to 1898	1898 to 1899	1899 to 1900	1900 to 1901	1901 to 1902	1902 to 1903	1903 to 1904
Political Science .	64	67	83	95	132	126	153	157	154
Philosophy . . .	130	151	158	220	242	244	294	353	431
Pure Science . .	35	55	66	73	76	63	61	84	107
Total	229	273	307	388	450	433	508	594	692

These figures are exclusive of all professional students in Law, Medicine, or Applied Science who attended courses in these schools. They do not include even such as were candidates for the higher degrees. In 1903–1904 there were 143 graduate students thus excluded. On the

other hand, these statistics include students in other professional schools who were simultaneously pursuing courses in the non-professional Faculties as candidates for the higher degrees, viz.: students in Teachers College and in the theological seminaries of New York City and its environs. There is, of course, no educational basis for any such distinction. It rests on the fact that Teachers College and the theological seminaries are financially independent institutions. 1904

The following table, compiled at the writer's request by the Registrar of the University, attempts to give a more scientific analysis of the body of students who attended courses under these three Faculties in 1903–1904. It separates graduate students who were candidates for the higher degrees from those students, graduate or non-graduate, who were not candidates for such degrees. It separates the candidates who were not studying in any professional school from those who were simultaneously pursuing professional and non-professional courses, including in this latter category the students primarily registered in Teachers College or in a theological seminary as well as the other professional students. It shows, finally, in the third column, the extent to which students having their major subject in one non-professional Faculty elect minor subjects in another.

CANDIDATES FOR DEGREES OF A.M. OR PH.D., 1903–1904

	Primary Non-professional Registration		Primarily Registered in a Professional School		Secondary Non-professional Registration	
School	Men	Women	Men	Women	Men	Women
Political Science	88	35	126	0	63	15
Philosophy . .	151	105	121	26	40	23
Pure Science . .	76	26	37	0	9	8

1904 There were, accordingly, 791 graduate students registered under the three Faculties as candidates for a degree; and it would seem that it might fairly be claimed that all these students belonged to the graduate schools. If, however, all students simultaneously pursuing professional studies are to be eliminated, the number of graduates primarily registered in the graduate schools in the year 1903–04 was 481; and, if the 21 special students primarily registered under the three Faculties in that year and their 23 auditors be added, the primary registration was 525.

Besides the students above enumerated, there appeared on the rolls of the School of Political Science, in 1903–1904, students of the Law School to the number of 153 who were pursuing courses offered by the Faculty of Political Science (chiefly in public law and comparative jurisprudence) as a part of their legal education, and not as candidates for the non-professional degrees. This body of students represents the realization of one of the chief purposes for which the School of Political Science was established — the broadening of legal study. Many of these students were attracted to Columbia by the opportunities which it offers for the study of public law and comparative jurisprudence, but all of them are necessarily regarded as owing primary allegiance to the professional school.

Under the narrowest system of reckoning, the three graduate schools of Columbia have grown to be the strongest non-professional graduate department in the United States. This result is partly due to Columbia's metropolitan situation; partly to the liberal policy pursued by the Trustees, especially during the administration of President Low; partly to a university organization which has thus far proved itself sufficiently centralized to maintain unity in essentials and sufficiently flexible to adapt itself to varying conditions; and partly to the fact,

ALMA MATER

Designed by Daniel C. French

recently noted by the Dean of the Faculty of Philosophy, 1904
that Columbia has not developed so large an undergraduate college as to constrain its teachers to adapt their advanced courses to the needs and capacity of undergraduate students. In the last instance, however, the success of the graduate schools has been due to the ability and fidelity of their teachers and the zeal of their students; for neither by situation nor by money nor by machinery is a university made, but by men.

MUNROE SMITH.

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BOOK THREE

THE PROFESSIONAL SCHOOLS

I. — THE SCHOOL OF MEDICINE

The beginnings of professional education in America are found, not within institutions of learning, but in the familiar personal association of the student with the professional man. Whether in theology, law, or medicine, the system was essentially the same. The future clergyman learned his theology and the art of preaching in the clergyman's library and before his pulpit; the law student was trained in the lawyer's office, and at the courts under the lawyer's eye; while the prospective physician read text-books, recorded cases, and compounded drugs in the office of the physician, and accompanied the latter on his daily round of visits. This relation of the younger and the older man was a survival in the new world of the system of apprenticeships which had prevailed so long in Great Britain in both law and medicine, and which even now has not entirely disappeared. Sometimes it fell well-nigh to the level of a rigorous slavery; more often it formed the foundation of a mutually helpful and continuing friendship. There was much in the method to be commended, and though in present days, when the demands of professional training are tremendous, it has largely died away, we still find the young graduate seeking the intimate personal counsel of the leader in his specialty.

1750 In medicine the relation of student to preceptor was early recognized by law and was regarded as essential to the existing methods of instruction; but the individual training was supplemented by private lectures and recitations on specified branches, given by the preceptor to small classes. Anatomy was a favorite topic of such special courses, and was often accompanied by demonstrative dissections. Thus, as early as 1647, the Apostle John Eliot wrote: "We never had but one Anatomy in the Countrey which Mr. Giles Firman . . . did make and read upon very well." In 1750 Dr. John Bard and Dr. Peter Middleton dissected the body of an executed criminal in New York City "for the instruction of the young men then engaged in the study of medicine." But such instances were isolated. Mr. Eliot wrote with regret that "our young students in Physick . . . have onely theoreticall knowledge and are forced to fall to practice before ever they saw an Anatomy made, or duely trained up in making experiments." And he early recognized that "it were a singular good work, if the Lord would stirre up the hearts of some or other of His people in England to give some maintenance toward some Schoole or Collegiate exercise this way, wherein there should be Anatomies and other instructions that way." Most American youths who had higher ambition in medicine than that which could be satisfied through training obtained in their preceptor's company and through chance autopsies, were forced to go to the universities of Europe; and thus Edinburgh, Aberdeen, Glasgow, London, Leyden, Paris, and Padua gave the instruction that was lacking at home.

Soon after its foundation the governors of King's College realized the need of which Mr. Eliot had written more than a century before, and in 1763 a course of lectures on anatomy was given at the College by Dr. Samuel Clossy, a graduate of Trinity College, Dublin, an enthusiastic anatomist and an excellent physician and

surgeon. Four years later Dr. Clossy and five other phy- 1767
sicians laid before the governors a proposal to institute a medical school within the College, and offered to give a course of lectures in the most necessary branches of medicine. After due consideration and a decision that the establishment proposed would tend to the honor and reputation of the College and would be a benefit to society, the Board voted, on August 14, 1767, to establish the medical school, and to appoint the six physicians as the first medical professors. By this action, King's College founded the second school of medicine to be inaugurated in the new world, one hundred and thirty years after the arrival of the first physician who settled permanently in the city of New York, and only two years after the founding of the medical school of the College of Philadelphia, the forerunner of the University of Pennsylvania. The school opened in November of the same year with the following staff, representing for the time an unusually generous amount of specialization: Samuel Clossy, Professor of Anatomy; Peter Middleton, Professor of Physiology and Pathology; John Jones, Professor of Surgery; James Smith, Professor of Chemistry and the Materia Medica; Samuel Bard, Professor of the Theory and Practice of Physic; and John V. B. Tennent, Professor of Midwifery. Sooner or later all of these men won high rank in their profession. Dr. Bard became the most eminent. A former student in arts of King's College, and a graduate in medicine of Edinburgh University, he brought to the new world and ably promulgated the views of the celebrated William Cullen, Professor of Medicine at Edinburgh, regarding the nature of disease. He became the physician of George Washington; was instrumental in founding the New York Hospital and the New York Dispensary; became in 1791 dean of the medical faculty of Columbia College, and in 1813 president of the College of Physicians and Surgeons; and was associated with American medical education in

1767 these various capacities for many years. Dr. Jones had been a pupil of the famous surgeons, Pott and William Hunter, of London, and Petit, le Cat, and le Dran of Paris. He was the leading surgeon of his day in America. He attended professionally both George Washington and Benjamin Franklin, and like his master, le Cat, became celebrated for his lithotomies. In 1775 he published "Plain, Precise, Practical Remarks on the Treatment of Wounds and Fractures," which was the first book on a medical subject to appear in the new world. Dr. Smith was a graduate of Leyden, and Dr. Tennent of Edinburgh.

The *New York Mercury* of November 9, 1767, contains the following quaint account of the opening of the school: —

"At the Opening of the *Medical School* in King's College, in this City:

"On Monday Forenoon last Week, the Governors, President, Tutors and Professors of the College, assembled at the Vestry Room in this City, from whence, being honoured with the Company of his Excellency the Governor, the Judges of the Supreme Court in their Robes, and the Gentlemen of the Law in their Gowns, they walked in Procession to the College Hall, where they were entertained with a very elegant and learned Discourse, by Doctor Middleton, *Professor of the Theory of Physic*, on the *Antiquity*, *Progress* and *Usefulness* of that Science. The Satisfaction of the learned and splendid Audience on this Occasion was universal, and more especially so, when they considered the Performance as the Beginning of an Institution, so replete with Advantages to Mankind in General, and to the inhabitants of this Province in particular.

"In the Evening of the same Day, was delivered by Dr. Clossy, *Professor of Anatomy*, an introductory Lecture to that important Science, which for genuine Learning and Precision, was justly applauded.

"The Day following, Dr. Smith, *Professor of Chymistry*, gave an introductory Lecture on that Branch, which for Elegance and Sublimity, met with universal Approbation.

"On Wednesday, Dr. Bard, Junior, *Professor of the* 1767
Practice of Physic, delivered his introductory Discourse, which for Masterly Composition and genteel Delivery, was highly pleasing to the respectable Audience. And

"On this day, at five o'Clock in the Afternoon, the introductory Lecture on Surgery will be given by Dr. Jones, *Professor* of that Science.

"The general Approbation which this Institution hath hitherto met with, on Account of its great Utility to Mankind, we hope will sufficiently recommend it to the Attention of such as intend the Practice of Physic, especially in this City and Colony. By a constant Application to Study under the Direction of the above Gentlemen Professors (if regularly prepared to attend them) young Gentlemen may in a few Years be intitled to and obtain the Honours of the Medical Profession, and thereby be qualified to enter legally upon the Practice of Physic; with singular Advantage to the respective Communities to which they belong."

The following excerpts from the announcement of the first session of the school indicate its standard and how closely it was modelled upon the universities of Great Britain: —

"1. Each Student shall be matriculated as in the *Universities* of *England*.

"2. Such Students as have not taken a Degree in *Arts* shall satisfy the Examiners, before their Admission to a *Degree* in *Physic*, that they have a compleat knowledge of, at least, the *Latin* Language and of the necessary Branches of *Natural* Philosophy.

"3. No Student shall be admitted to his Examination for a *Bachelor's Degree*, in less than three years after his matriculation, and having attended at least one compleat Course of Lectures under each Professor; unless he can produce proper Certificates of his having served an Apprenticeship of Three Years, to some reputable Practitioner, in which Case he may be admitted to his Examination in *Two Years* from his Matriculation.

"4. In one Year after having obtained a *Bachelor's Degree*, a student may be admitted to his Examination for

1792 the *Degree* of Doctor, provided he shall have previously attended two Courses of Lectures under each Professor, be of Twenty-two Years of Age, and have Published, and publickly defended, a Treatise upon some *Medical Subject.*

"5. The Mode of Examination, both publick and private, shall be conformable to the Practice of the most *Celebrated Universities* of Europe."

It is seen from the above that it was contemplated to give, as in England, the degrees of both bachelor and doctor of medicine. The first baccalaureates were conferred upon Robert Tucker and Samuel Kissam in 1769, and the first doctorates upon the same individuals in 1770 and 1771 respectively. King's College thus antedated all other colleges in America in conferring the degree of doctor of medicine in course. By the year 1774 nine other individuals had received the baccalaureate, and this degree was not given thereafter.

When, early in the war of the revolution, King's College was closed, the work of the medical school also ceased, and it remained in abeyance throughout the war. On the reopening of the College under the name of Columbia in 1784 a new medical faculty was appointed. But little seems to have been done in the years immediately following the war, and it was not until 1792 that a complete reorganization was effected and instruction was resumed under a competent faculty of nine, with the eminent Dr. Bard as dean and the sole representative of the original faculty. Success, however, was not thus assured, and though the work of teaching was continued for the succeeding twenty-one years, the number of students was small, and the school did not occupy a leading position. During this time only twenty-four students were graduated. Meanwhile the College of Physicians and Surgeons had been organized, and in 1813 the medical school of Columbia was discontinued and its faculty was transferred to its newer and more successful rival. From that time

until, in 1860, the College of Physicians and Surgeons 1807
in turn came under the ægis of Columbia, no medical instruction was undertaken in the latter institution.

In the last decade of the eighteenth, and the first of the nineteenth century, along with the growth of New York as a social and industrial metropolis, the city rapidly became an important medical centre. The New York Hospital, the Lying-in Hospital, the New York Dispensary, the *Medical Repository*, the first medical journal for the publication of original articles to appear in America, and the Medical Society of the County of New York, were established. Private medical instruction was carried on, even so far as to lead to the establishment of private schools; but the need of a well-organized and well-equipped college was constantly felt. This need became so strong that in 1807 the newly organized and active Medical Society of the County of New York, which already possessed the power of examining students and granting licenses for the practice of medicine, memorialized both the Legislature and the Regents of the University of the State, praying for incorporation as a College. A charter, dated March 12, 1807, was promptly granted by the Regents, establishing in the city of New York the "College of Physicians and Surgeons," "for the promotion of medical science and diffusing the knowledge of the healing art."

The first faculty was as follows: Nicholas Romayne, President, and Lecturer on Anatomy; Samuel L. Mitchill, Vice-president, and Professor of Chemistry; Edward Miller, Professor of the Practice of Physic and Lecturer in Clinical Medicine; David Hosack, Professor of Materia Medica and Botany, and Lecturer on Surgery and Midwifery; Archibald Bruce, Registrar, and Professor of Mineralogy; Benjamin De Witt, Professor of the Institutes of Medicine, and Lecturer on Chemistry; John Augustine Smith, Adjunct Lecturer on Anatomy. These

1807 men represented much of the best in the medical and scientific circles of the day. Dr. Romayne, to whose efforts the inauguration of the College was largely due, was a graduate in medicine of Edinburgh, and had studied in Paris and Leyden. He had been a professor of medicine in Queen's (now Rutgers) College, and a professor of physic, anatomy, and chemistry in Columbia. Dr. Mitchill was distinguished for his breadth of learning. For nineteen years he was a professor in Columbia. With Drs. Miller and Elihu H. Smith, in 1797, he helped to found and edit the pioneer of American medical journals, the *Medical Repository*, and he added much to medical literature. For many years he served as a physician at the New York Hospital. In addition to his activities in medicine he became prominent in public life as a representative and a senator in Congress, and in various other capacities. Dr. Hosack, who had graduated in medicine at Edinburgh, was a celebrated botanist, and active in both scientific and medical affairs. Freeing himself from medical traditions, he was original and courageous in pathological conceptions and methods of treatment. Dr. Bruce was also a medical graduate of Edinburgh, and an enthusiastic scientist. Dr. Smith had been a student of medicine in London, and was a member of the Royal College of Surgeons. He was at one time president of William and Mary College. He served in the College of Physicians and Surgeons in various professorial capacities for twenty-four years, and in 1831 became also its president. Under such men, each eager and enthusiastic in his work, the College assumed at its outset an elevated professional tone and a strong earnestness of purpose which it has ever since maintained. Its doors opened auspiciously in November, 1807, with fifty-three students, in a house in Robinson Street, now Park Place. During the presidency of Dr. Romayne the number of students gradually increased, and the College became established

on a firm educational and a safe financial basis. Though 1813
threatened for a time by internal dissensions, it was improved by a reorganization by the Regents, and its future became assured. The annual course was of four months' duration, lasting from the first day of November until the first day of March, and was supplemented by certain optional lectures in zoölogy, botany, chemistry, and mineralogy during the spring months. At least two years of study were expected before graduation, but the first class did not complete its course until 1811, when degrees were conferred upon eight candidates.

The administration of Dr. Samuel Bard, the second president, continued from 1811 until his death in 1821. The event of first importance during this period was the absorption, in 1813, of the medical faculty of Columbia College, a union which more than doubled in number, and greatly increased in strength and prestige the teaching body of the school. Among the acquisitions from Columbia were Wright Post, Joint Professor (with Dr. Smith) of Anatomy, Physiology, and Surgery; and Valentine Mott, Professor of the Principles and Practice of Surgery; while at about the same time John W. Francis became Professor of Materia Medica. Dr. Post had studied under distinguished masters in London, and he vied with the English surgeons in the brilliancy, courage, and success of his operations. Dr. Mott had been a pupil of the celebrated Sir Astley Cooper in London, and of the famous teachers of Edinburgh. He became without question the leading surgeon of his time in America, while his eminence was recognized in Europe by his election to membership in the French Institute and the prominent medical bodies of London, Brussels, and Paris. His skill and success in the performance of major operations were phenomenal, and his professional life was a long and constantly busy one, forming an epoch in the history of American surgery. Dr. Francis was one of the first graduates of

1826 the College. He possessed valuable professional and social connections in this country and abroad, became the leading general practitioner of the city, and added much of value to medical literature. During this period the College removed from Magazine (now Pearl) Street, where it had been situated since its brief occupancy of the house in Robinson Street, to new quarters in Barclay Street, which with subsequent additions served as its home for twenty-four years. Here the number of its students rapidly increased and soon surpassed two hundred, drawn from all parts of the United States. It now acquired possession of the botanical garden of Dr. Hosack, situated three miles to the north and comprising the tract of land now bounded by 47th and 51st streets and Fifth and Sixth avenues. This was intended to serve as a valuable aid in the study of materia medica, but it proved a disappointing venture, and relief was felt when the garden was transferred to Columbia College.

The successor of Dr. Bard in the presidency was Wright Post, who served from 1822 to 1826. Through no fault of his, these were years of dissension, resulting largely from the criticism of professional rivals outside the college circle; and though the work of the College went steadily on, the controversies were only ended in 1826 by the summary resignation of the entire faculty. Some of these, notably Dr. Mott, returned to the service of the institution in later years.

The fourth president was John Watts, a graduate of Edinburgh, and a leading practitioner. Prominent among those newly called to become instructors were John Torrey, in chemistry and botany; John B. Beck, in botany and materia medica, and later in medical jurisprudence; Alexander H. Stevens, in the principles and practice of surgery; Edward Delafield, in obstetrics and diseases of women and children; and Joseph M. Smith, in the theory and practice of physic, and clinical medicine,

— to the last of whom the College was indebted for forty 1837
years of continuous service. Dr. Torrey, who served the College for nearly thirty years, represented the best type of the scientific man of his day. He was the friend of Asa Gray, and was one of the founders of American science. Dr. Beck was a forceful and influential contributor to medical literature. Dr. Stevens, who had been a student of John Abernethy and Sir Astley Cooper in London, and Larrey and Boyer in Paris, became eminent as a surgeon. He was for twenty-two years a visiting surgeon at the New York Hospital, retained his professorship for eleven years, later became president of the College, and throughout his long and honored life was constantly active in the service of humanity and of his profession. Dr. Delafield had also been a pupil of Abernethy and Sir Astley Cooper. He became a leading practitioner, and for many years labored zealously and ably in the interests of the College. With a firm president, an able faculty, and devoted trustees, the institution, within a few years, largely recovered from the untoward results of the previous discord, and entered upon a long period of prosperity and growth.

In 1831 the scholarly John Augustine Smith succeeded to the presidency, and his administration lasted twelve years. Pressed on by the northward growth of the city, the College was removed in 1837 to a commodious and well-appointed building in Crosby Street. Optional spring and autumn courses were inaugurated to supplement those of the regular winter session. The faculty was notably enriched by the appointment of three men, none of whom served the College less than a quarter of a century, and who, as warm friends, were a unit in seeking and maintaining for the institution a commanding place in American medical education. These were Robert Watts, in anatomy and physiology, Willard Parker, in surgery, and Chandler R. Gilman, in obstetrics and

1855 diseases of women and children. Dr. Parker's career of thirty years was especially distinguished by the maintenance of progressive ideals, great strength of character, and preëminent leadership. It was directly due to his foresight and enterprise that clinical instruction was inaugurated at the College building as supplementary to bedside instruction in the hospitals. This feature has ever since existed.

Alexander H. Stevens was president from 1843 to 1855, a period of constant prosperity. The regular curriculum was now lengthened from four to four and a half months. An important addition to the teaching facilities was the chair of physiology and pathology, later changed to pathology and practical medicine, its incumbent being Alonzo Clark. Dr. Clark had had exceptional opportunities for the study of pathology and other branches of medicine in London and Paris, and his lectures were regarded as models. The College enjoyed his distinguished services for thirty-seven years, first as professor and later as president. Another event of importance was the coming, to occupy a chair of physiology and microscopic anatomy, of John C. Dalton, only a few years before fresh from the laboratory of Claude Bernard, the eminent French physiologist. Dr. Dalton may rightly be regarded as having introduced into America the experimental method in physiology. He ultimately became Dr. Clark's successor in the presidency.

Upon Dr. Stevens's resignation in 1855, Thomas Cock, long the honored vice-president, was elected president, and though, because of advancing age, he served for only three years, it was during this period that the College, the location of which had been encroached upon by commercial buildings, advanced still farther northward, and began a new period of expansion on 23d Street at Fourth Avenue.

The eighth president, from 1858 until 1875, was Ed-

ward Delafield, and under him the College was enabled 1860
to take an important step for which its long growth had prepared it. This was the alliance with Columbia College. It was preceded by a severance, by mutual consent and legislative action, of the relations which the College had had from the first with the Regents of the University of the State. This placed in the hands of the trustees for the first time the important powers of granting degrees and of appointing their own officers. The alliance with Columbia, which was formally ratified in June, 1860, while conferring honor upon both institutions, was scarcely more than a nominal one. Each institution retained its own autonomy, continued to hold its own property and to manage its own financial affairs, and was in all essential respects independent of the other. The diplomas of the medical graduates were to be signed, however, by the two presidents respectively, and the degrees were to be "publicly conferred by the president of the College of Physicians and Surgeons, sitting with the president of Columbia College." The College of Physicians and Surgeons, while retaining its own title, was thereafter known officially as the "Medical Department of Columbia College." Columbia thus took under her mantle the institution in whose interests in 1813 she had sacrificed her own medical faculty, and she acquired in turn a professional school of rank and dignity. The alliance was the foreshadowing of the closer union which was to come thirty years later, when Columbia was being rapidly transformed from a college into a university.

The removal of the College to its new quarters in 23d Street gave opportunity for expansion, and this soon began, especially in the direction of practical instruction. Within a few years the number of clinics held at the College was more than trebled, and the title of clinical professor was established and conferred upon several individuals. Instruction in the various special

1875 branches of medicine was gradually inaugurated, and the facilities for demonstrative teaching in anatomy, physiology, and chemistry were much increased. The curriculum was lengthened from four and one-half to five months. During the civil war a course of lectures on military surgery was given by William Detmold. At the close of the war the roll of students rapidly lengthened and amounted in 1866 to four hundred and sixty-five. Upon the death of Dr. Gilman in 1865, the chair of obstetrics was occupied by T. Gaillard Thomas, who was called thence from the New York University. In this position, and subsequently as professor of gynecology, Dr. Thomas gave to the College the prestige derived from his eminence as a practitioner. In 1860 Thomas M. Markoe became the adjunct professor of surgery, and in 1870 he was advanced to the professorship as the worthy successor of Dr. Parker.

Upon the death of Dr. Delafield in 1875, Alonzo Clark was called to the presidency, and he remained the honored head of the College for nine years. The years following his accession were made notable by the successful completion of a project of the Alumni Association to establish a laboratory for purposes of instruction, especially in pathology. The sum of $10,000 was raised, a portion of which was expended for an immediate equipment, while the rest was invested as a fund for continued maintenance. The laboratory was established in 1878, and Dr. Francis Delafield, then adjunct professor of pathology and practical medicine, was made its director. This was the first step made by the College toward providing laboratory facilities for the students, and is hence of special historic interest. That the project should have been inaugurated in reference to one of the important sciences on which medicine is based demonstrates the enlightened sympathy of the alumni toward a broad medical education.

The annual course had now been lengthened from five to seven and a half months, the teaching body had be-

come greatly enlarged by the appointment of many active 1884
young men, the number of students had surpassed five hundred, and the resources of the College were taxed to the utmost. Further growth under the existing conditions was impossible. In 1884 Dr. Clark retired from the presidency. His successor was John C. Dalton, the five years of whose incumbency witnessed momentous events. These were the acquirement of the present site in West 59th Street; the erection of buildings surpassing, at the time, those of any other medical school in the United States, in spaciousness and adaptability to their uses; the removal of the College to its new site; and an extension of its work beyond all previous records. These events were made possible through the generosity of Mr. William Henry Vanderbilt and his children. Mr. Vanderbilt's gift was of the value of $500,000, of which sum he had expended $200,000 for the land, leaving $300,000 for building purposes, which was ultimately used for the erection of the main college building. A little later Mr. and Mrs. William D. Sloane proposed to erect and maintain the Sloane Maternity Hospital, to be under the immediate direction of the professor of obstetrics, and to afford free obstetrical service and opportunity for practical instruction. The four sons of Mr. Vanderbilt presented the sum of $250,000 for a third building, — the Vanderbilt Clinic, — which was to serve as a free dispensary and home for the college clinics. The preparation of suitable plans and the erection of the three buildings proceeded without unnecessary delay, much thought being expended in adapting the buildings to the demands of the several departments, especially in the providing of laboratories and other facilities for practical instruction. The main building was completed and formally dedicated on September 29, 1887, immediately after which the work of the regular session began. The dedication of the Sloane Maternity Hospital and the Van-

1887 derbilt Clinic occurred on December 29 of the same year. By subsequent liberal gifts from the Messrs. Vanderbilt and Mr. and Mrs. Sloane, an adjoining parcel of land was purchased which allowed the erection of an anatomical institute; larger and more numerous laboratories were added to the main building; the Clinic was doubled in size; and the Maternity Hospital was enlarged and more than doubled in capacity. The new buildings gave opportunity for expansion in all departments; the course was lengthened to eight and one-half months; and a third year of study was added to the two years which had existed from the first, a change which led to the disappearance of the time-honored system of the student's apprenticeship to a preceptor. The teaching staff was necessarily augmented in number; former courses were elaborated and perfected, and new courses were inaugurated. Demonstrative teaching was made more prominent than ever before. Practical work in laboratories and clinics was greatly augmented and made obligatory for all students. Apparatus, instruments, models, demonstration and museum specimens, and all that constitutes the material outfit of a well-equipped medical school were provided. The college was thus enabled to take a position of leadership in the medical world which it had never before held.

Throughout its history the College of Physicians and Surgeons has held the warm interest and support of its Alumni. Among early benefactors were Dr. John McClelland, a graduate of the Class of 1838; Dr. J. Carney Rogers and Professor John B. Beck. The Association of the Alumni was formed in 1859 and was incorporated in 1873. Through its efforts a fund of $6,000 was raised, which, supplemented by a bequest from Mr. Benjamin Cartwright, enabled the association to establish two prizes of $500 each, awarded on the basis of competitive essays and in alternate years. The Alumni Association

VANDERBILT CLINIC SLOANE MATERNITY HOSPITAL MAIN BUILDING

THE COLLEGE OF PHYSICIANS AND SURGEONS

prize is open to Alumni of the College only. The Cart- 1889
wright prize is open to the medical profession at large. The Association contributed directly to a most important advance in medical education, by providing in 1877 a sum of money amounting to $10,000, which, upon the advice of Dr. Francis Delafield, was designated as a Laboratory Fund and formed the beginning of the present laboratory facilities in pathology, bacteriology, and histology. In 1883 Mr. James T. Swift presented the sum of $10,000 to purchase and maintain an outfit of physiological apparatus in memory of his brother, Dr. Foster Swift, of the Class of 1857. Other gifts are the Stevens Triennial Prize Fund, established by President Stevens ; the Alonzo Clark Scholarship, the Joseph Mather Smith Prize, the Proudfit Fellowship, and the Harsen gift, the income of which, after having been applied for forty-five years to prizes for clinical reports and for proficiency in examinations, is now to be devoted to the support of scholarships in medicine for the degree of Doctor of Medicine. Dr. Jacob Harsen, the donor of the Harsen gift, was a graduate of Columbia College in the Class of 1825, and of the College of Physicians and Surgeons in 1829.

The death of Dr. Dalton occurred eighteen months after the removal of the College, and Dr. James W. McLane, then professor of obstetrics, to whose individual efforts the opportunities for expansion were largely due, was elected, in 1889, the twelfth president. Two years later the culminating action was taken which was to place the College on an academic basis befitting its professional status. Like most of the American medical schools, the College of Physicians and Surgeons, although organized under the auspices of the Medical Society of the County of New York and under the jurisdiction of the Regents of the University of the State, had been from the first a proprietary institution. As such it had achieved its dignity, its honor, and its professional standing; and its

1891 constitution had not been altered by its alliance with Columbia College. But a proprietary school can never acquire the prestige and the permanence in the learned world which are possible for a school forming a part of a great university. Columbia, under the enlightened leadership of Mr. Low, was undergoing the transformation that was destined to result in the making of a great university; and it was only natural that the thought of a fusion of the two institutions should arise within both. Suggestion was followed by early action. Deliberations and conferences over the details of the merger were held at intervals throughout more than a year, and in November, 1891, the final step was taken which joined the two forever and inseparably, the College of Physicians and Surgeons transferring its property to the trustees of Columbia College, and becoming an integral part of the latter. President Low wrote at the time: "The union thus begun through division in 1814 has become permanent through consolidation in 1891."

To enumerate the multitudinous evidences of progress since the union would require space far beyond the limits of this chapter. An important step was taken in 1894 when a fourth year was added to the curriculum, thus quadrupling within a period of fifty years the time demanded of the student. In 1898 a department of physiological chemistry, with adequate and well-equipped laboratories, was inaugurated under the direction of Russell H. Chittenden. The teaching staff has more than doubled, and now surpasses two hundred. A further evidence of progress is the opening of certain courses in anatomy, physiology, physiological chemistry, and bacteriology to students of pure science as electives for the degrees of master of arts and doctor of philosophy; a step which was followed by the assignment of representatives of those subjects to the faculty of pure science. But these are only specific instances of a general broadening and uplift-

ing which has resulted from the union. The College has 1904
felt the dignity and responsibility associated with its academic rank. High ideals have always been its possession, but now they have become so in an added degree. It has been spurred on to greater achievements by contact with the other schools of the University, and by a realization of the true university spirit. A university aims, not merely to transmit, but to augment knowledge, and this aim permeates the present School of Medicine. Its laboratories and its clinics are not simply places for instruction, but have become important centres of research ; not only are future practitioners there educated, but future investigators are nurtured, and the scientific medicine of to-morrow will gain from the broad spirit of scientific inquiry which animates the College of to-day.

The foregoing brief account of the rise and growth of medical instruction in the School of Medicine is intentionally confined to a recital of a few of the most striking facts in its history. Notwithstanding the vicissitudes of title and administrative control, throughout the one hundred and thirty-seven years of its existence this instruction, under the successive names of King's College, Columbia College, the College of Physicians and Surgeons, again Columbia College, and lastly Columbia University, may be regarded as constituting a logical entity. Just as Columbia is the historic university of the city of New York, so its medical college, under whatever name, is the city's historic school of medicine. It will prove of interest to consider the historical relations of certain of the branches of medicine as they have been developed within this school.

To the popular mind a medical school suggests first the idea of dissection, and from early times anatomy has rightly been regarded as the most fundamental of the medical sciences. Though its work has been hampered by popular prejudice and superstition, and though in the

1788 early days it was often necessary to secure bodies for dissection surreptitiously and illegally, it has persevered until its scientific status has been recognized by law. In the School of Medicine of Columbia a professorship of anatomy has existed from the beginning. In the anatomical instruction, in addition to the lectures and demonstrations, dissection has constituted the chief method. In the time of Dr. Clossy and his successors, the opportunities for dissection were meagre, and the work was carried on under difficulties and even dangers. The famous Doctors' Riot of 1788, which resulted in the killing of several persons, was incited by the discovery of a portion of a human body in a window of the New York Hospital, and was the demonstration of a fanatical mob against the hospital, Columbia College, the houses of several physicians, and the jail in which the physicians had been placed for safe-keeping. In the following year the legislature of New York passed the first American law designed to regulate the practice of anatomy. This allowed the bodies of executed murderers, incendiaries, and burglars, to be given by the court to surgeons for dissection "in order that science may not . . . be injured by preventing the dissection of proper subjects." This gave some relief, but anatomical material, legally obtained, was not abundant. The entry in the College accounts of 1807 of the sum of $136.95, "To Cash, paid Dr. Smith, for anatomical Purposes," if given in detail, would doubtless reveal tales of midnight adventures. An enactment in 1847 allowed the College to use the unclaimed bodies of convicts dying in the State prison at Sing Sing; but it was not until the passage of the more liberal Public Health Law of 1854 that the supply of bodies became ample, and rendered unnecessary the forcible methods which had hitherto obtained. Practical anatomy was made compulsory for all students in 1878. Since, in 1792, Dr. Wright Post brought to Columbia his anatomical cabinet, acquired

in Europe, the College has rarely been without a museum; 1895
but none bears comparison with the splendid collection illustrating human and comparative morphology which has been made in recent years through the personal efforts of Professor Huntington, and which is designed "to present, in as complete a manner as possible, a view of the evolution of the forms of animal life and of their natural relations." The first laboratory of anatomy, apart from the dissecting room, was opened in 1887. The building of the Anatomical Institute in 1895 was an epoch in the history of the department, since it gave greatly increased space and facilities for work in all directions. A variety of courses is now offered, and there is every opportunity for investigation.

The year of the inauguration of medical work in Columbia College succeeded that in which appeared the final volume of the "*Elementa physiologiæ corporis humani*" of Haller, the distinguished physiologist of Germany and Switzerland, and the discoverer of the independent irritability of muscle and of nerve. His book marks the dividing line between the physiology of olden and that of modern times. Beginning with Haller, the College has witnessed the rise of the modern experimental science with its ingenious methods, the death of the dogma of vital force, and the origin and potent growth in influence of the cell doctrine, of the idea of protoplasm as the physical basis of life, and of the theory of evolution. The early American teachers of physiology were disciples of Haller, as were those of Europe, and his "*Primæ lineæ physiologiæ*," in its English version, served as a text-book in this country until well into the nineteenth century. At times under the title of "physiology," at times under that of "institutes of medicine," the subject was taught in the College by means of lectures and text-books, and usually as an adjunct to another subject, until the coming, in 1854, of Dr. Dalton, in point of time the first experimental physi-

1854 ologist of America. Dalton brought to this country the enthusiasm and investigating spirit of his great master, Claude Bernard, who, when his pupil once said to him, "I think it must be so," had replied, "Think! Why think, when you can experiment?" Dalton did not engage in medical practice, but gave his time completely to the work of instruction and investigation, and his teaching, illustrated constantly by experimental demonstrations, aroused enthusiasm. As he had brought the spirit of the best French science, so his pupil and successor, John G. Curtis, introduced that of Ludwig and the Germans, and the department has ever since felt the influence of these two potent schools. The opening of the College at its present site in 1887 allowed the installation for the first time of adequate physiological laboratories, which were provided with an unusually ample outfit of apparatus through the agency of the Foster Swift Memorial Fund, established a few years before, and still existing, for the purchase of the "more expensive, delicate, and complicated instruments and appliances, mainly instruments of precision, requisite for the pursuit of physiological science." Since then research has been constantly carried on, and the publications of the laboratories are well known in this country and abroad. Besides demonstrative teaching for the students of medicine, courses leading to the graduate degrees in the School of Pure Science have, for the last decade, been a feature of the physiological work, and during the past year an extensive course of practical work in the laboratory has become obligatory as a part of the course leading to the degree of doctor of medicine.

The first teachers of chemistry in Columbia were doubtless under the influence of Stahl's phlogistic notions, for it was not until 1774 that Priestley made his immortal discovery of oxygen. But the modern chemistry had hardly begun to appear on the continent of Europe, before it crossed the ocean and was taught to the students of medicine in New

York. Dr. Samuel Mitchill was early announced in print 1898
as adopting the "Anti-Phlogistic System," and he himself claimed that he "taught the reformed chemistry of the French and unfurled the banner of Lavoisier sooner . . . than any other professor in the United States." From the beginning of the medical school to the present time there has been an unbroken line of practical chemists and chemical instruction. Even the early lectures were illustrated by demonstrations, which, however pyrotechnic and explosive they may have been, were still an advance upon mere didactic instruction, and it would appear that a chemical laboratory for the preparation of such demonstrations existed from the first. Practical work in chemistry was possible for the students after 1862, but it was not compulsory until the removal of the College to its present site. A long forward stride was taken in 1898, when in view of the rapid rise of physiological chemistry as a distinct science, a separate department in that subject, with fully equipped laboratories, was established under the directorship of Professor Chittenden.

In the eighteenth century, systems and theories were abundant in medicine, and pathology was distinctly speculative. Boerhaave with his "enormon," Stahl with his "anima," Hoffmann with his "æther," Cullen with his "nervous principle," and Brown with his "irritations," all held sway, and their systems extended on into the succeeding century. The early medicine of America was naturally influenced by these men. In the third and fourth decades of the nineteenth century there flourished in Paris a prominent and influential school of pathological anatomists. Dr. Alonzo Clark, who visited Paris after his graduation from the College of Physicians and Surgeons, came under the influence of some of these, such as Chomel, Cruveilhier, Andral, and Louis, and when he returned home he came as their enthusiastic disciple and the advocate of the new pathology. Armed with his micro-

1878 scope he joined the staff of instructors of the College in 1847 as the occupant of the newly created chair of physiology and pathology. Up to that time pathology had been treated mainly as adjunct to one or another branch of medicine, but thereafter it was recognized as deserving individual consideration. The modern cellular pathology may be said to have arisen when Virchow in 1858 announced his dictum, "*omnis cellula e cellula*," and applied the cell doctrine to pathological tissues and processes. Francis Delafield, the successor of Dr. Clark in the chair of pathology, had been a pupil of Virchow, and his insistence upon the necessity of practical work led to the establishment of the pathological laboratory by the Alumni Association in 1878. This was a timely event. Two years before, Koch, studying the bacillus of anthrax, had made the first conclusive demonstration of the production of a specific human disease by a specific bacterium; and the new and revolutionary science of bacteriology was in the throes of its birth. Moreover, pathology, hitherto morphological, was becoming also experimental. The far-reaching results of the action of the alumni are now seen in the extensive laboratories of pathology, bacteriology, and histology, which, under Professor Prudden's guidance, have grown from the original seed, and which afford abundant opportunities for instruction and research. Practical work in these three subjects was made obligatory for all students of medicine immediately after the removal of the College to its present site.

The time-honored term "materia medica," coupled with "chemistry," "botany," "mineralogy," "institutes of medicine," "medical jurisprudence," "clinical medicine," or "therapeutics," gave a title to a professor's chair in the College until 1903. In accordance with the growing importance of the study of the physiological action of drugs by exact experimental methods, it has now given place to the more timely title of pharmacology, and the

change has carried with it the establishment of student 1892
laboratories of pharmacology and pharmacy.

The chair of practice of medicine, the focal point of medical instruction, has also continued from the beginning, and has reflected the continual changes in medical practice. During the century and a quarter of its existence, systems and theories have died away, and empiricism has fallen back before the advance of scientific rationalism in prevention and treatment. In this advance the Columbia School of Medicine has had no inconsiderable share. The same is strikingly true of the development of surgery. Our first surgeons studied at the Edinburgh school, with Pott and the two Hunters in London, and with le Cat, Petit, and le Dran in Paris. Later the influence of John Abernethy and Sir Astley Cooper of London, and of Boyer, Larrey, and Dupuytren of Paris became potent. But while our countrymen have learned valuable lessons at the foreign schools, their native ingenuity, dexterity, and boldness have not been restrained by foreign conventions, and have won for our national surgery a position of supremacy. Not least prominent in the American advance has been the long and honorable line of surgeons of the Columbia school, — Jones, Post, Mott, Stevens, Parker, Markoe, Sands, McBurney, Weir, and Bull. The first instruction undertaken by the College in both medicine and surgery was by means of lectures only. But before the close of the eighteenth century the establishment of the New York Hospital afforded clinical opportunities at the bedside, and they have never since been wanting. Early in the following century Valentine Mott introduced the method of performing the chief surgical operations on the cadaver before the students. Clinics for both medical and surgical cases have been held at the college buildings since 1841, and during the past year a laboratory for surgical research has been established.

Of the more specific branches of medicine only one, —

1887 obstetrics, at first called midwifery,— has had its representative on the faculty of the College continually since the latter part of the eighteenth century, and it has usually been combined with that of the diseases of women and of children. In recent years three departments have taken the place of the one, each with its staff of instructors. In the early years of the past century the students were allowed to visit the Lying-in Hospital and the Lying-in ward of the Almshouse, and at least since 1853 a small amount of practical work in obstetrics has been possible for all students. But the opening of the Sloane Maternity Hospital in 1887 gave the long-desired opportunity to offer adequate practical instruction to both graduates and undergraduates. Instruction in other specific branches began between the years 1841 and 1866 in the optional summer courses which were then multiplying in connection with the growth of the College clinics, and from the summer courses these branches were gradually introduced into the curriculum of the regular session.

Columbia College early recognized the importance of hospitals in connection with medical instruction. The first incumbent of the chair of practice, the distinguished Samuel Bard, in his address at the first commencement of the school in 1769, took occasion to urge the desirability of establishing a hospital in the city. The Governor, Sir Henry Moore, received the idea warmly, and a subscription for the purpose was begun on the same day. Upon the petition of Drs. Bard, Middleton, and Jones, Lieutenant-governor Colden granted in 1771 a charter for the establishment of the New York Hospital. Owing to the destruction of the first building by fire and the on-coming of the war of the revolution, the hospital was not completed and opened for patients until 1791. The medical faculty of Columbia again took the initiative in recommending the formation of a library in connection with the hospital, and they contributed for this purpose both

books and money. The early records show that the 1904
students of the College were allowed to attend the hospital practice. On the opening of the College of Physicians and Surgeons, similar arrangements were made for the students of that institution under Dr. Miller, then professor of practice. Since then the College and hospital have always had intimate clinical relations. Dr. Macneven's practice at the Almshouse in Chambers Street was also open to the students in 1807. The removal of the Almshouse to Bellevue in 1816, and the simultaneous establishment of its hospital, do not seem to have carried with them special clinical facilities, but the latter were secured by the reorganization of the institution in 1849. From the beginning of the century the Lying-in Hospital also afforded certain privileges for study. New York and Bellevue were the important hospitals of the city during the first half of the century. In the period of the civil war and the years immediately following it, numerous hospitals were built, and clinical opportunities for students increased correspondingly. At present the College gives instruction in eleven of the more important hospitals, and cases occupying more than two thousand beds are accessible to the students. For years an important feature of the clinical instruction has been that which is afforded by the clinics in the College buildings, where patients whose condition allows them to leave their homes are treated in the presence of the students. Established in 1841 as a general medical and surgical clinic, they were gradually increased in number by successive additions in special branches until, in 1876, ten clinics were in operation, providing opportunities for students to observe, diagnose, and prescribe. The building of the Vanderbilt Clinic and its subsequent enlargement gave at last an adequate home for this feature of the College work and opportunity for its continued extension. These clinics are visited annually by nearly fifty thousand patients, who present a wide

1904 range of disease and afford unusual privileges for study. The third and fourth years of the curriculum are now chiefly devoted to clinical work either at the College or in the hospitals.

In the history of the School of Medicine the fact is prominent that in educational matters the institution has been a conservative leader. It has been ready to adopt new ideas and methods when once they have been proved efficient, but it has avoided the new that is of uncertain value. Its influence upon other schools has been potent, but it has been content to let others try disastrous educational experiments. Its heritage from the old world has been great, but it has not been shackled by medical tradition, and it has lived to instruct the old-world teachers. It has avoided sensationalism, and upheld sound medical doctrine. Conspicuous in the annals of education and medical progress, to the world at large it has proved a mighty force. The ancient oath of Hippocrates, to which all who go from its walls subscribe, adjures each "by whatever he holds most sacred," to "be loyal to the profession of medicine," and to practice his art "in uprightness and honor," and this oath they have kept. In times of pestilence their courage has not failed. In military and naval service they have upheld their country's honor and the good name of their school. They have seen the old medicine pass away, and their enlightened efforts have helped to bring in the new. The honorable past of the College is already achieved, and under the inspiration of the University a still more honorable future is assured.

FREDERIC S. LEE.

THE LIBRARY AND LAW SCHOOL BUILDING, 49TH STREET

II. — THE SCHOOL OF LAW

In his famous speech for Conciliation with the Colonies, Burke named as one of the six capital sources of the fierce spirit of liberty, which characterized the colonists, the general diffusion of legal knowledge. "In no country perhaps in the world," he declared, "is the law so general a study." In support of this statement he referred to the great number of lawyers among the deputies sent to the Continental Congress; to the fact that the colonists were printing law-books for their own use and that as many of Blackstone's Commentaries had been sold in America as in England, and cited General Gage's assertion "that all the people in his government are lawyers, or smatterers in law." It was this widespread study of the law, in Burke's opinion, which made the colonists so "acute, inquisitive, dexterous, prompt in attack, ready in defence, full of resources," which led them to "augur misgovernment at a distance, and snuff the approach of tyranny in every tainted breeze."

It is not strange, therefore, that King's College, founded as it was when this taste for legal study was becoming prevalent, should have been the first institution of learning in America to establish a professorship of law. This was done in 1773, and from that date until the College was closed by the Revolutionary War, John Vardill, A.M., occupied the chair.[1]

[1] The doubts which have been expressed about Mr. Vardill's having entered upon the duties of this office are dispelled by a letter written by him from King's College, in September, 1773, to George Washington concerning the latter's stepson, John Parke Custis. Undoubtedly, Mr. Vardill left New York for England before the College was closed in 1776.

1784 No sooner had King's College been reorganized and rechristened as Columbia, than her Trustees voted to establish a law school, with three professorships, viz. : "A professorship in the Law of Nature and Nations, a professorship in the Roman Civil Law, a professorship in the Municipal Law." This action was taken on December 14, 1784, and bears witness to the broad views and high ideals of the Columbia Trustees of that day. But it is not surprising that such views and ideas were entertained by a board whose leaders were John Jay and Alexander Hamilton. Unfortunately, however, Columbia's finances were then at a low ebb, and the ambitious project of a law school with three professors was not carried out, although the idea of providing for legal instruction was still cherished.

The financial condition of the College was greatly improved in 1792 by a grant from the state of various sums in partial reparation of losses sustained during the war, and of the further sum of £750 annually for five years, "to be applied to the payment of the salaries of additional professors." It was now possible for the Trustees to do something for legal instruction. Accordingly, a professorship of law was established in 1793, and James Kent, A.M., was unanimously elected to fill the chair, at an annual salary of £200. It was not an extraordinary stipend, to be sure, but it should be remembered that the incumbent was a young and struggling lawyer, and that it was supposed the perquisites of the position would equal the salary. Moreover, the duties of the professorship were not engrossing, and the appointment, he wrote his brother, "will even aid my professional practice at the bar," and prove "not only honorable but profitable."

He entered upon the preparation of his lectures with much enthusiasm, reading in the original, by way of special equipment, "Bynkershoeck, Quintilian, and Cicero's rhetorical works, besides English reports and digests." That the course was not intended primarily for professional

students appears from the prospectus contained in a pamphlet published in 1794, entitled "The State of Learning in the College of New York." At that time the College embraced two faculties — the Faculty of Arts and the Faculty of Physic, and the prospectus referred to appears in the sketch of the first of these faculties. It is as follows: — 1794

"Mr. Kent, having been so recently appointed, has not as yet entered upon a course of lectures; but this professorship is intended to comprise a brief review of the history, the nature, the several forms, and the just ends of civil government — a sketch of the origin, progress, and final settlement of the United States — a particular detail of the organization and duties of the several departments of the general government, together with an examination of such parts of the civil and criminal codes of the federal jurisprudence, as shall be the most susceptible of illustration and most conducive to public utility. The courts of the several states and the connection they bear to the general government will then be considered, and the more particular examination of the Constitution of this State. The whole detail of our municipal law, with relation to the rights of property, and of persons, and the forms of administering justice, both civil and criminal, will then be treated fully and at large."

The opening lecture of the course was delivered November 17, 1794, and was published in pamphlet form by the college Trustees for private distribution.[1] It was well received, not only by those who listened to its delivery, but by the far larger body of its readers. Of the latter class was John Adams, then Vice-president of the United States, who wrote to his son Charles Adams, "I am much pleased with the lecture, and esteem the talents and character of the Professor." Some idea of the spirit with which the young professor entered upon the course may be formed from the following extracts from the opening and closing paragraphs of the lecture: "This is the first

[1] This rare and valuable pamphlet was republished in the *Columbia Law Review*, Vol. III, p. 330.

1795 instance in the annals of this seat of learning that the science of Municipal Laws has thus been admitted into friendship with her sister arts and been invited to lend her aid to complete a course of public education. . . . If he to whom is intrusted in this seat of learning, the cultivation of our laws, can have any effect in elevating the attention of some of our youth from the narrow and selfish objects of the profession, to the nobler study of the general principles of our governments, and the policy of our laws ; — If he can, in any degree, illustrate their reason, their wisdom, and their propitious influence on the freedom, order, and happiness of society, and thereby produce a more general interest in their support, he will deem it a happy consolation for his labors."

The course consisted of twenty-six lectures, extending, as he wrote his brother on March 1, 1795, "not only through the Constitution and jurisprudence of the Union, the Constitution of this and the other states, but our doctrine of real property. My first plan was to examine the law of personal property, including the commercial branches, and the system of our criminal code. But I found myself absolutely unable to complete the whole, and was obliged to leave this first course imperfect. It will be an easy thing to make these additions and review and improve the whole by next November. I am satisfied that my lectures have been well received and that my expectations are answered." Upon the fly-leaf of his own copy of the opening lecture, he noted that he "was honored by the attendance throughout the course of seven students and thirty-six gentlemen, chiefly lawyers and law students who did not belong to the college." In the same memorandum he notes that "during my second course, commencing November, 1795, I read thirty-one lectures, in my office, and had only two students besides my clerk." The following year no students presented themselves for the course, and on May 2, 1797, he tendered his resignation.

It was not accepted, however, until April, 1798, and this 1828
final action appears to have been taken, not because the Trustees shared the dissatisfaction with the performance of his duties which the professor had expressed in his letter of resignation, but because he had been appointed a judge of the Supreme Court.

In the letter of resignation he refers to the fact that in the early part of the second season he published the three preliminary lectures, together with a summary of the entire course, in order that the public might become acquainted with the details of his plan. While this publication did not draw students, it did give the author a reputation abroad, and was cited as an authority in Brown's "Treatise on Civil and Admiralty Law," published shortly afterward in England. This is believed to be the first citation ever made of an American law-book by an English author.

After Kent's retirement from Columbia, the professorship of law was unoccupied until 1823, when he was reappointed to the chair, after his retirement from the office of chancellor, at the age of sixty — that being the age limit fixed by the Constitution to the Chancellor's term of office. Some years afterward he wrote Thomas Washington: "The trustees of Columbia College immediately tendered me again my old office of Professor, which had lain dormant from 1795. I undertook (but exceedingly against my inclination) to write and deliver law lectures." Perhaps this reluctance was due in part to the fact that his former lectures had not attracted more students, and in part to his estimate of those lectures. We have seen that he expressed satisfaction with them at the conclusion of the first season, but later he recorded in his memoranda: "I have long since discovered them to have been slight and trashy productions; I wanted judicial labors to teach me precision." The unfortunate fate of his first course was not exceptional; it was shared by courses given in other parts of the country about that time, by men of great ex-

1824 perience and distinguished reputation. Associate Justice Wilson of the United States Supreme Court became professor of law in the College of Philadelphia in 1790, but was unable to carry on his work successfully after the first year. At Harvard Justice Parker, of the State Supreme Court, met with no greater encouragement, when he entered upon the duties of Law Lecturer.

The second attempt at legal instruction in Columbia was productive of remarkable results, although they were of a kind not contemplated either by the Trustees or by Chancellor Kent.

However reluctant he may have been to take up again the work which he had laid aside in a mood of disappointment twenty-six years before, he soon became thoroughly interested in it. Early in January, 1824, he wrote to his brother, "I have for two or three weeks engaged with great zeal in preparing law lectures." A fortnight later he writes: "I have got eight to ten lectures written out and mean to begin the first of February, and shall deliver but two formal lectures a week, with one more private for the matriculated students only. By this means I can keep up two lectures a week until June, and that shall be the extent of my first imperfect and broken course." In November of the same year, he entered upon a longer and fuller course, although in a letter of the 9th of that month he intimates that he is still engaged in preparing new lectures, which give him a good deal of trouble and anxiety and compel him to study and write all the time. He continued to discharge the duties of law professor until the spring of 1826, when, as he wrote in 1828, "having got heartily tired of lecturing, I abandoned it." Perhaps the success which attended the publication of the first volume of his Commentaries, and the labor required for the preparation of the later volumes, account for his withdrawal from academic work. Certainly, there is nothing to indicate a lack of appreciation either by students or by the

College authorities. In the preface to the first volume, the 1826
author writes: "In the performance of my collegiate duty, I had the satisfaction to meet a collection of interesting young gentlemen of fine talents and pure character, who placed themselves under my instruction, and in whose welfare a deep interest is felt. Having been encouraged to suppose that the publication of the lectures might render them more extensively useful, I have been induced to submit the present volume to the notice of students, and of the junior members of the profession, for whose use they were originally compiled. Another volume is wanting to embrace all the material parts of the lectures which have been composed." He soon found, however, that his plan could not be completed within the limits of two volumes. A third volume was published in 1828 and a fourth in 1830.

And so it came about that Columbia's first and most famous professor of law was not the founder of a law school, but the author of a legal classic. It is true the name of James Kent, LL.D., was carried in Columbia catalogues as the professor of law, and that he continued the incumbent of the professorship until his death in 1847. But his name served only to give lustre to the faculty list. No work was done and no emoluments were received by him as occupant of the chair of law after 1826. Still, Columbia claims, and rightfully claims, a share in the fame of Kent's Commentaries. Undoubtedly, it was her institution of a law professorship, and her early and abiding faith in James Kent as the most suitable man for the place, that induced him to undertake their preparation. Her sons have a right to feel a peculiar pride in them as an expansion of lectures delivered upon her foundation and under her immediate auspices; and to rejoice in the fact, as stated in Abram S. Hewitt's terse encomium, that they "have had a deeper and more lasting influence in the formation of national character than any other secular book of the century."

1857 In 1848 William Betts, a graduate of Columbia in the class of 1820, a trustee of the College and a distinguished member of the New York bar, was chosen to the professorship made vacant by Chancellor Kent's death. He delivered a few lectures, but they were given as a labor of love to his *alma mater*, and were spasmodic and intermittent, as such labors of love generally are.

After his resignation in 1854, the professorship was vacant for some years. During this period the financial resources of the College had been largely increased, and the Trustees felt the time had come when they could safely attempt to provide for the study of law as a part of a university course. Their original plan, as set forth in a College statute of 1857, included a School of Jurisprudence, in which the following studies were to be pursued: History; Political Economy; Political Philosophy; the Principles of Natural and International Law; Civil and Common Law; the writings of the Greeks and Romans, and of the modern civilians and jurists, appropriate to the last three subjects. It will be observed that this department was not intended as a professional school. In connection with the School of Letters and the School of Science, it was to furnish a university or postgraduate course of study leading to the degree of Master of Arts. As explained by Mr. Betts, chairman of the Committee which had matured the plan, it permitted the College students, at the end of their junior year, to select either of these schools for their senior year. After receiving the Bachelor's degree, they were to be encouraged to remain for two years more in the school which they had selected, and obtain the Master's degree. Each school was also open for graduates of other colleges. In the fall of 1857 the School of Jurisprudence had six students.

A few months later a special committee, consisting of H. Potter, William Betts, G. G. Van Wagenen, Samuel B. Ruggles, and George F. Allen, reported that they had

"had several deliberations on the best mode of organizing 1858
the institution in the Law Department, and that they were of the opinion that a greater probability of success will attend this department, should it be organized with a view of actual admission to the bar ; and that instruction in other and higher branches, not absolutely necessary for such admission, may be superadded to the course, and placed within the reach of students." This superadded instruction in history and the other subjects enumerated in the statute of 1857 was to be offered as an inducement to students to join the school, but was not to form a part of the Law School curriculum. The report was adopted, and the decision was reached to give the control of the new department to one man. A month later, in June, 1858, the name of Theodore W. Dwight was suggested as Professor of Municipal Law, and his appointment was formally confirmed by the Trustees October 4, 1857.

Professor Dwight had already gained a high reputation as a teacher of law at Hamilton College, where he had organized and maintained for some years a flourishing law school. At Columbia this reputation was not only maintained but enhanced, until he was recognized in England as one of the most eminent teachers of his day. In an article on "Legal Education," Professor Dicey referred to him, in 1871, "as one of the ablest professors that any school of law ever possessed"; and again as having "a reputation throughout the whole Union as the greatest living American teacher of law, who has in substance founded and keeps alive, simply by his own capacity as a teacher, one of the best schools of law."[1] Shortly afterwards Mr. Bryce, writing upon "The Legal Profession in America," declared "Columbia College is fortunate in possessing a professor of great legal ability and an extraordinary gift of exposition. Better law teaching than Mr. Dwight's it is hardly possible to imagine; it would be

[1] *Macmillan's Magazine*, XXV, p. 127.

1878 worth an English student's while to cross the Atlantic to attend his course."[1]

The school which had attained such eminence in 1871 was opened in 1858 with much solicitude. To use Professor Dwight's words: "It was not without misgiving, it may be not without trepidation, that a new effort was made to establish systematic legal instruction in New York." Doubts of success might well have been entertained in view of previous failures here, and of the moderate prosperity of law schools in other places. These institutions, about eighteen in number, did not command an attendance of more than five or six hundred men. An enrolment of thirty-five students at the opening session served to dispel all doubts about the success of the new Law School. "The next year," writes Professor Dwight, "the number of students was sixty-two. In the third year there were one hundred and three. Many of these early students were members of the bar. In one year the lawyers in attendance numbered seventy-five." For many years nearly all the work of regular legal instruction was done by Professor Dwight. It is true, lectures were given by Professor Lieber on Political Science, by Professor Nairne on Moral Philosophy, by Professor Ordronaux on Medical Jurisprudence, and by distinguished members of the New York bar on special topics; but these lectures did not exceed three in each week, were given in the evening, and attendance upon them was not required. Professor Dicey was quite right, therefore, in declaring that the Columbia Law School of the early seventies had been founded and was kept alive by the genius of a single instructor.

The continued growth of the school called for an increase in the teaching force, and, in 1878, two professors were added. The requirements for admission were raised, and it was "determined to augment the tests of attendance and proficiency." Provision was made, also, for a

[1] *Macmillan's Magazine*, XXV, p. 209.

third year of study for those who desired to continue their work beyond the regular course, which covered but two years. Meanwhile, the legal profession of New York and other leading states had become convinced that the standard of admission to the bar should be raised, and that the period of study should be lengthened. Effect was given to this opinion by the New York Court of Appeals, in its rules which required of candidates for the bar a three years' course of study in a law office, or a course of two years in a law school, following a successful examination in certain prescribed branches. With this demand of the profession for higher standards of legal education, the Trustees of Columbia were in hearty accord. As the Law School had required of its first students more work and greater legal knowledge than were barely necessary for admission to the bar, so, it was felt, should the requirements now be advanced correspondingly beyond those of the Court of Appeals. After much discussion and no little difference of opinion, it was decided in 1888 that the Law School course should be increased to three years. "This extension of the course," wrote Professor Dwight in 1889, "is largely due to the persistent and enlightened efforts of Stephen P. Nash, an eminent practitioner at the New York bar, to whom the Law School owes a permanent debt of gratitude." Another Trustee of the period, who took a prominent part in extending the course and raising the standard of legal education at Columbia, was Charles M. Da Costa. Before the new scheme of Law School work was fairly initiated, Professor Dwight availed himself of a provision of the university statutes which entitles a "professor who has been fifteen successive years or upwards in the service of the university, and who is also sixty-five years of age or over, to be made an emeritus professor on half pay," and tendered his resignation from active service, to take effect July 1, 1891. In accepting his resignation, the Trustees directed that, "in recognition of Dr. Dwight's 1888

1891 preëminent services as Warden of the Law School since 1858, he be requested to sit for his portrait," and at a later date his honored name was given to one of the professorships in law.

Upon his retirement a reorganization of the Law Faculty was effected, and many changes were made in the curriculum, as well as in the methods and aims of the school. With an extension of the course from two to three years, and an increase in the number of professors giving their entire time and energies to legal instruction, it became possible to expand the curriculum and to augment the work required of students. Under the old régime, seven and one-half hours a week, during two years, made up the sum total of the required class-room work. Under the new, fourteen hours a week during three years are the minimum amount required, while to-day twenty-three hours a week are offered to the student in the second year and twenty-six hours in the third year. In other words, the work required for the degree at present is nearly three times as great as it was a dozen years ago, while the amount of private law work offered is more than four times as great.

When the school was opened, and for many years thereafter, it "was located at a distance from the College, so as to be nearer the business portion of the city, and more convenient of access to students, many of whom are connected with lawyers' offices while pursuing their studies in the school, and have, therefore, to come from the lower portion of the city." Thus wrote Professor Dwight in 1876. Accordingly, the exercises were held during the first year in the rooms of the Historical Society, 11th Street and Second Avenue; from 1858 to 1873, in the old Colonnade Building, 37 Lafayette Place; and from 1873 to 1883, at the corner of Lafayette Place and Great Jones Street, in a house erected and long occupied as a family residence by the late Peter Schermerhorn, father of the

AVERY LIBRARY LAW LIBRARY

THE UNIVERSITY LIBRARY BUILDING

late chairman of the Trustees. Even after the school 1872
was removed to 49th Street and Madison Avenue, the lecture hours were arranged so as to give students who desired it the opportunity of spending most of each day in a law office.

At present all law-school exercises are held on the noble site of the University on 116th Street. No attempt is made to arrange lectures for the convenience of young men in law offices seven or eight miles away. Indeed, the student is not encouraged to mingle law-office work with that of the Law School, but is urged to give all his time and energies, during the course, to a scientific study of the law. This policy has proved most successful. In 1893–1894 the enrolment of students in the school was 247. In 1903–1904 it was 406, inclusive of 22 College seniors, who took the first year law work.

Reference has been made to the fact that in the Columbia Law School of the early seventies, nearly all of the instruction required for the degree of Bachelor of Laws was given by Professor Dwight, whose title was that of Warden of the Law School and Professor of Municipal Law. From the opening of the school to the year 1875–1876, this remarkable teacher was accustomed to give instruction to the first year class in general commentaries upon municipal law, upon contracts, and upon real estate. The second year course included equity jurisprudence, commercial law, the law of torts, criminal law, evidence, pleading, and practice.

President Barnard in his annual report for 1872 declared that the success of the "school has been so signal as to threaten to be overwhelming to the accomplished professor to whose superior ability and remarkable powers as a teacher it has been chiefly owing ; and such as to make it a question requiring the early attention of the Trustees, in what manner he may be most effectually aided and relieved."

1887 The first relief afforded was by the appointment in 1875 of George Chase, A.B., LL.B., a graduate of the school, to an instructorship in the department of Municipal Law. A year later he became an assistant professor, having the subjects of Criminal Law, Torts, and Procedure. In 1879 Judge John F. Dillon, formerly Judge of the Supreme Court of Iowa, and late Justice of the United States Circuit Court, and author of a standard treatise on "Municipal Corporations," was appointed to the chair of Real Estate and Equity Jurisprudence, to be succeeded in 1883 by Benjamin F. Lee, Esq., of the New York bar. Further relief was afforded Professor Dwight in 1876 by the appointment of Professor John W. Burgess to the College "Professorship of History, Political Science, and International Law, the duties of which" were to be "divided between the College and the Law School in such manner" as might be determined thereafter. At the time of his appointment Professor Burgess had occupied the chair of Political Science at Amherst for three years, and became Dean of the Faculty of Political Science at Columbia in 1890. In his report to the President of May 16, 1887, Professor Dwight described the work pursued by the senior class of that year as follows: "The rules of Equity Jurisprudence under Professor Lee, and the topics of Evidence, Torts, and the Code of Procedure under Professor Chase. In the topics of Shipping and Insurance they have been instructed by Professor Dwight. They have had also under him a review of the law of contracts. They have been reviewed by Professor Lee in the Law of Real Estate." "The Junior Class," he reported, "has studied under Professor Dwight the general outlines of Municipal Law, and more particularly the Law of Contracts, and under Professor Lee the Law of Real Estate."

It will be observed from this report that the scheme and scope of instruction had not changed materially during the thirty years of the school's existence. In 1889,

however, as stated on a preceding page, the Trustees de- 1891
cided to increase the Law School course to three years. The new policy was not fairly launched until the autumn of 1891. In his first report as Dean of the reorganized Faculty Professor William A. Keener pointed out in detail the differences between the old and new schemes of study, the chief of which may be summarized as follows: (1) The new scheme assumed three years as the unit of the course, while the old scheme had treated two years as the unit. To facilitate the treatment of the subjects in detail, the instruction in Contracts in the first year was limited, under the new policy, to pure or elementary Contracts; that is to the elementary principles dealing with the formation, interpretation, performance, and discharge of Contracts, while such subjects as Agency, Sales of Personal Property, Insurance, Negotiable Paper, and Partnership — in which, while the principles of Contracts are often applied, other legal doctrines are considered — are studied in the second and third years. (2) Under the new scheme of instruction the student pursues concurrently through the year a number of subjects. Under the old scheme, the student studied one subject to its completion before taking up another topic. (3) The number of hours per week of required class-room work was largely increased. (4) There was also a large increase in the number of elective subjects. (5) The student was permitted to combine for his degree private and public law.

The subjects taught during the year 1891–1892 may well be compared with those named in Professor Dwight's report of 1887. They are as follows: —

First Year Class. Common Law Pleading and Procedure; Contracts; Criminal Law and Procedure; Elements of Jurisprudence; Domestic Relations; Real Estate, and Torts.

Second Year Class. Administrative Law; Agency; New York Code of Civil Procedure; Comparative Consti-

1891 tutional Law; Equity Jurisprudence; Equity Pleading and Procedure; History of European Law; Insurance; Real and Personal Property; Sales of Personal Property.

THIRD YEAR CLASS. Bailments; Equity Jurisprudence; Evidence; International Private Law; Negotiable Paper; Partnership; Private Corporations; Public International Law; Quasi-Contracts; Suretyship and Mortgage; Systematic Jurisprudence; Wills and Administration.

For 1903–1904 the subjects offered to law students by members of the Law Faculty and of the Political Science Faculty were as follows: —

FIRST YEAR CLASS. American Constitutional Law; Contracts; Criminal Law; Equity; Pleading and Practice; Real and Personal Property; Torts.

SECOND YEAR CLASS. Administrative Law; Admiralty; Agency; Bailments and Carriers; Comparative Constitutional Law; Domestic Relations; Equity (Trusts); Insurance; Negotiable Paper; Pleading and Practice; Quasi-Contracts; Real and Personal Property; Roman Law; Sales of Personal Property.

THIRD YEAR CLASS. American Constitutional Law; Comparative Jurisprudence; Conflict of Laws; Corporations; Damages; Equity; Evidence; History of European Law; International Law; Mortgages; Municipal Corporations; Partnership; Real and Personal Property; Spanish-American Law; Suretyship; Taxation, Law of; Trusts and Perpetuities under the New York Revised Statutes; Wills and Administration.

Upon the retirement of Professor Dwight from the school in 1891, Professor Chase, as well as Professor Robert D. Petty, who had been lecturer and assistant professor since 1886, and Alfred G. Reeves, who had been a lecturer for one year, withdrew. The reorganized Faculty consisted of the Dean, William A. Keener, who came to Columbia in 1890 from the law Faculty of Harvard University; Francis M. Burdick, who had been a member of the Faculties of the Law Schools of Hamilton College and of Cornell University; George M. Cumming, who came from the active practice of the law, and of George W. Kirchwey, from the deanship of the Albany Law School, while Dr.

John Ordronaux continued to give an optional course of 1903
lectures in Medical Jurisprudence. In 1893 Charles T. Terry became a lecturer, and was advanced to a professorship in 1902. The Faculty was enlarged by the appointments of George F. Canfield and Henry P. Starbuck in 1894. Henry W. Hardon, from the Faculty of Cornell University Law School succeeded Professor Starbuck in 1896, and was succeeded by John W. Houston in 1899. Upon Professor Houston's resignation in 1901 Henry S. Redfield, of the School of Law of Cornell University, became a member of the Faculty. Harlan F. Stone, a lecturer since 1899, was advanced to an adjunct professorship in 1903. Alfred Hayes, Jr., became a tutor in law in 1902, while Jackson E. Reynolds, who had been a member of the law Faculty of Leland Stanford University, became a lecturer in 1903. In the same year Francis C. Huntington was appointed a lecturer and John D. Kaps a tutor, while James B. Scott left the deanship of the College of Law of the University of Illinois for a professorship in the school.

The Law Library of the University numbers about 30,000 volumes. Many of these have been purchased from funds given to the University by alumni, or have been presented directly to the University. Among these friends of the Law School may be mentioned Julien T. Davies, John McKeon, William G. Low, J. C. Bancroft Davis, A. C. Bernheim, Alexander Cole, John J. Jenkins, Sampson Simpson, Edgar J. Nathan, John F. Dillon, Miss Ida H. Ogilvie, and the Abraham Underhill Estate. There has also been an anonymous benefactor who has given large sums for the purchase of law books.

Other benefactors of the Law School have been Charles Bathgate Beck, who left the sum of $8,000 for a prize scholarship in the School; and Gen. Horace W. Carpentier, who has recently established a fund of $100,000 in memory of his brother, James S. Carpentier, for the benefit of the School. The income of this fund will be

1904 devoted to the maintenance of courses of lectures to the students of the Law School by the most distinguished living jurists.

During the early days of the Law School, provision was made for the granting of free and reduced tuition to needy students, but during President Low's administration the system of free and reduced tuition was abolished throughout the University and a system of scholarships established in its place. The Law School has now available for annual award twenty-one scholarships, each covering the tuition fee.

The first graduating class from the Law School organized an alumni association. Within the last two or three years this association, which had not been very active, has taken a new lease of life and now has a membership of 300, including many of the judiciary, as well as other leading members of the Bar.

The Law School Announcement for 1904–1905 gives the officers of government and instruction as follows: —

Officers of the Faculty. *President*, Nicholas Murray Butler, Ph.D., LL.D.; *Dean and ex-Officio Member of the University Council*, George W. Kirchwey, A.B.; *Secretary*, Henry S. Redfield, LL.D.; *Elected Delegate to the University Council*, Francis M. Burdick, LL.D.

Officers of Instruction. *Dwight Professor of Law*, Francis M. Burdick, A.M., LL.D.; *Kent Professor of Law*, George W. Kirchwey, A.B.; *Nash Professor of Law*, [vacant] *Professors of Law*, George F. Canfield, A.B., LL.B., Henry S. Redfield, A.M., LL.D., Charles T. Terry, A.B., LL.B., James B. Scott, A.M., J.U.D.; *Adjunct Professor of Law*, Harlan F. Stone, A.M., LL.B.; *Professor of Political Science and Constitutional Law*, John W. Burgess, Ph.D., LL.D.; *Professor of Roman Law and Comparative Jurisprudence*, Munroe Smith, A.M., J.U.D.; *Eaton Professor of Administrative Law and Municipal Science*, Frank J. Goodnow, A.M., LL.D.; *Hamilton Fish*

Professor of International Law and Diplomacy, John Bassett Moore, A.B., LL.D.; *Tutor*, Alfred Hayes, Jr., A.B., LL.B.; *Lecturers*, Jackson E. Reynolds, A.B., LL.B.; Thaddeus D. Kenneson, A.B., LL.B. 1904

Not only has the teaching force been enlarged, the course of study been expanded, and the amount of the required work been increased during the last thirteen years, but the standard of admission has been raised. Until the year 1875 persons were admitted to the school without any preliminary examination. In 1878, as we have seen, requirements for admission were imposed, and these were increased from time to time, until the school was put upon a postgraduate basis at the beginning of the year 1903–1904. At present, graduates of colleges and scientific schools in good standing are admitted without examination. All persons other than such graduates must present satisfactory evidence of preliminary training obtained in higher institutions of learning in this country or abroad equivalent to that of a full college course.

FRANCIS M. BURDICK.

III. — THE SCHOOL OF MINES AND ASSOCIATED SCHOOLS

In June, 1904, the School of Mines of Columbia University completed its fortieth academic year. In comparison with the mining schools of the old world it is a young institution. It is nevertheless the pioneer mining school of this country, and perhaps by virtue of its seniority has influenced more than most the development of mining education here.

In connection with the School of Mines there have been developed at Columbia courses of instruction in architecture, in analytical, organic, and industrial chemistry, in civil, electrical, and mechanical engineering, and in graduate work in pure and applied science. These have in turn led to the establishment of a School of Architecture under its own teaching staff, a School of Chemistry and a School of Engineering under the Faculty of Applied Science, and a graduate school under the Faculty of Pure Science. In this chapter we have to deal with the Schools of Mines, Chemistry, and Engineering.

It was perhaps fortunate that the School of Mines was the first to be organized. The mining engineer must not only be well trained in general engineering studies, which require as a foundation mathematics, physics, mechanics, thermodynamics, and other mathematical subjects, but he must have some special knowledge of civil engineering, of mechanical engineering, and of electrical engineering. He must also be a metallurgist, which involves a knowledge of general chemistry, industrial chemistry, analytical chemistry, and assaying. He must also be a geologist, with

THE SCHOOL OF MINES BUILDING, 1867–1874

expert knowledge of mineralogy and lithology. In the 1863
attempt to provide for those needs of the mining student, the foundations were laid for the development of professional instruction in many branches of science and of engineering, and for the symmetrical growth and development of the University in all these lines. The course in mining engineering, on the other hand, has profited by the growth of the other departments and by the equipment of laboratories and the accumulation of apparatus of instruction in these allied branches.

The School of Mines owes its existence to the efforts of the late Professor Thomas Egleston, who submitted a plan of organization in March, 1863, which met with the endorsement and approval of the Trustees of Columbia College. The Trustees had for a number of years been considering the establishment of a School of Applied Science, and were not unwilling to consider the School of Mines as a first step in that direction. The College treasury at that time, however, did not permit the Trustees to assume any large financial responsibility.

In May, 1863, it was finally decided to establish a School of Mines, and in December, 1863, the Trustees authorized the setting apart of rooms in the College building for the use of the proposed school, and appropriated $500 for cases for specimens. They also authorized the appointment of a professor without salary — thus in a very prudent and cautious manner taking the first step toward the establishment of the new institution. In February, 1864, Mr. Egleston was appointed as the first professor in the new School of Mines, and was intrusted with the agreeable duty of carrying his plans into execution. Professor Egleston succeeded in interesting Professor Francis L. Vinton and Professor Charles F. Chandler in the project, and in September, and October, 1864, these gentlemen received appointments, also without salary, from the Trustees.

Professors William G. Peck, Charles A. Joy, and

1864 J. Howard Van Amringe of Columbia College, having volunteered their services, were assigned to seats in the new Faculty. In 1866 the Chair of Geology was created and filled by the appointment of John S. Newberry.

Of these seven professors five had studied abroad and were familiar with the educational traditions of the universities of the old world. Professors Egleston and Vinton had been students of the École des Mines of Paris, Professor Chandler and Professor Joy had taken their doctorates at Göttingen, and Professor Newberry had studied for two years in Paris. Professors Vinton and Peck and later Professor Trowbridge were distinguished graduates of West Point. Professor Egleston was a graduate of Yale and Professor Chandler of Harvard. Most, if not all, of the new Faculty were experienced instructors, and from the first their deliberations were influenced and guided by the distinguished educator and scientific scholar, President Frederick A. P. Barnard. The influence of these founders of the School of Mines is to be seen in most of the principal features of the institution as it exists to-day. To the thorough mathematical foundation for engineering studies, characteristic of West Point, has been added the logical arrangement and systematic development of subjects of the École des Mines, and the thoroughness and scientific accuracy of the German university. From the beginning the School of Mines has been cosmopolitan, reflecting the character of the metropolis in which it is located, and has drawn its inspirations from the best educational traditions of the old world and the new. This character has been maintained throughout its history, and the Faculty to-day, while largely alumni of Columbia, as is natural, is more than one-third composed of graduates of other colleges and professional schools, while over one-half have been at one time connected with other institutions as professors or students.

The development of the present course of instruction 1868
has been a gradual one. At first the requirements for admission included only algebra, geometry, and plane trigonometry. In 1866 analytical trigonometry was added. In 1868 the age of admission was raised from sixteen to eighteen years, spherical trigonometry, general chemistry, and physics were added to the requirements for admission, and a preparatory year was organized, in which instruction was given in these and other subjects. In 1876–7 this preparatory year was made the first year and the course increased to four years, as at the present time. From time to time the requirements for admission have steadily increased. In 1877, for example, to enter the new first class, the student must have reached the age of seventeen, and was required to pass examinations in elementary algebra, geometry, and show a slight knowledge of French and German. Six years later the requirements, in addition to the above, included arithmetic; English grammar, composition, and rhetoric; United States and English history; physical geography, and free-hand drawing; and a more intimate knowledge of French and German. In 1887 the age for entrance was again increased to eighteen years. At the present time, the applicant must have completed the equivalent of a four years' high school course, and must pass examinations in mathematics, including elementary and advanced algebra, plane and solid geometry, plane and spherical trigonometry, in elementary physics and chemistry, and in English, French, German, and history. Latin and Spanish are accepted as substitutes for French.

The relative weight attached to these subjects is as follows: —

Mathematics	4 points
Physics	1 point
Chemistry	1 point
Drawing	1 point

1904		
	English	3 points
	History	2 points
	German	2 points
	French, Spanish, or Latin	2 points

It will be noticed that English, history, German, and French (or other language substituted for French), count for 9 points out of 16, or about 56 per cent of the total requirements.

Columbia stands almost alone in exacting requirements of this character, and also is almost alone in devoting no time in the professional courses to studies of a liberal character. At other institutions the equivalent of one or one and a half years is given to culture studies. At Columbia all the time in the four years is devoted to fundamental training in mathematics and science, and to professional studies. A part of this work, however, nearly the equivalent of two years, is of a real collegiate character, and not in any way inferior to the so-called culture studies as a means of mental discipline, while the time gained for professional work by the exclusion of the other culture studies, such as language, economics, history, has added very greatly to the value of the professional training given at Columbia. It is recognized that this has been done at a certain sacrifice. This sacrifice has been deliberately made, and it is believed that the gain more than balances the loss. The loss is in part offset, it is true, by the 56 per cent of culture studies in the requirements for admission. The Faculty have long recognized, however, the great importance of collegiate studies to the professional man, and have for many years strongly urged all candidates for admission to take at least two years of college work before entering upon the engineering courses. As a result of this policy, and of the high requirements for admission, about 35 per cent of the students have had one or more years of college training, and nearly half this number have taken a first degree.

To provide a better education for the professional stu- 1904
dents a combined collegiate and professional course of six years has been organized at Columbia, and has been in successful operation since 1897. Students taking this course are registered in the College for four years, but are allowed to take the studies of the first and second years under the Faculty of Applied Science and count them toward the A.B. degree. As the studies of these two years are mainly of a collegiate character, — mathematics, mechanics, chemistry, physics, mineralogy, geology, and the like, — the result is satisfactory from the collegiate standpoint, as this combined course fulfils all the requirements of a liberal education, and there is undoubtedly great gain to the professional student taking such a course. It is not improbable that in the near future the Faculty may take action looking toward the requirement of this six years' course for all professional students.

In other words, the complete professional engineering course of study finally contemplated at Columbia University is six years in length, the first three being devoted to what may be termed a general college training and the last three to technical work. The formulation of this complete course of professional study is one of the most important steps yet taken in Columbia University, and it is much to be desired that this curriculum may at the earliest practicable date become the required course of study, rather than an optional course as it now stands.

At the beginning the course of study in the School of Mines was three years. In 1868, as already noted, a fourth year was added. At first there was but one course of study, that for the degree of mining engineer. In 1868 additional courses in metallurgy, in geology, and natural history, and in analytical and applied chemistry were added, and the school became a school of applied science, though retaining the special name of School of Mines. In 1869 a course in civil engineering was added. Later,

1896 in 1881, a course in architecture, in 1889 a course in electrical engineering, and in 1897, on the removal to the present site, a course in mechanical engineering.

In 1896 it was recognized that the name "School of Mines" was inadequate to cover the many lines of study offered. At the same time, under this name, the institution had become well known throughout the country, and it was not thought advisable to change or abandon the name under which this reputation had been secured. The difficulty was met by organizing four schools, viz., a School of Mines, a School of Chemistry, a School of Engineering, and a School of Architecture. All of these were placed under the direction of the Faculty of Applied Science, a form of organization not uncommon abroad, and adopted in a number of cases here. The School of Architecture in 1902 was put on an independent footing, and will eventually come under the jurisdiction of a Faculty of Fine Arts, when that body shall be organized.

The School of Mines has passed through several periods of reorganization, each of which has materially increased the efficiency of instruction.

In 1877 Professor Francis L. Vinton resigned the chair of Civil and Mining Engineering, and Professor William Petit Trowbridge was called from the Sheffield Scientific School to the chair of Engineering. At the same time Henry S. Munroe was appointed adjunct professor of Surveying and Practical Mining, and Frederick Remsen Hutton was made instructor in Mechanical Engineering. Under this reorganization the instruction in engineering was greatly strengthened and its scope increased. On the theoretical side new courses were added, and existing courses were subdivided and developed. On the practical side a summer course in mining was organized for the systematic study of mining methods and of mine plant at the mines, and instruction in surveying field work was

introduced, at first in the afternoons and on Saturdays in 1889
Central Park, and later as a regularly organized summer class at a permanent camp in Litchfield County, Connecticut. The fifteen years during which Professor Trowbridge remained at the head of the Engineering department were years of important progress, in which the courses in mining engineering, civil engineering, and later electrical engineering were firmly established on a sound basis. Professor Trowbridge believed that in each of these courses the aim should be first to emphasize the engineering side of the profession, and give the student thorough training in the mathematical studies which lie at the base of all engineering design work. This foundation he believed should be practically the same for all classes of engineers, and to his insistence on this thorough fundamental engineering training in all courses is largely due the reputation the School of Mines has attained in late years.

In 1889, under the administration of Professor Trowbridge, there was established a course in electrical engineering leading to the degree of electrical engineer. Francis B. Crocker and Michael I. Pupin were appointed instructors, the former to cover the applied, and the latter the theoretical side of the subject. To provide for the immediate demand for trained engineers the course at first was open to graduates in civil, mining, and mechanical engineering. Nineteen graduate students enrolled for the two years' course, but the demand for the services of even partly trained men proved so great that but five remained to take the degree. Their places were taken by others, and for a number of years a few men were graduated each year from this graduate course. Later, provision was made for such graduate students in the regular course, as is the case to-day.

The time seemed ripe for the establishment of a full four year course in electrical engineering. With the

1892 rapid development of the applications of electricity to useful purposes, including telegraphy, telephone service, electric lighting, and electric power, the work had largely fallen into the hands of men without special training. In many cases these pioneers in electrical engineering had not even the advantage of a general scientific education. A limited number had taken courses in mechanical, civil, or mining engineering, and others had studied a certain amount of mathematics, physics, and chemistry, giving them a fair foundation for electrical work.

In October, 1892, as a result of the experience gained with the graduate course, a full four year course in electrical engineering was organized, and started with an enrolment of 64 students. In outlining the curriculum it was determined to adapt it from the beginning to the needs of the electrical engineer, and not to adopt the makeshift of modifying existing courses by the addition of a few electrical subjects. As in the other courses in the School of Mines Professor Trowbridge's influence secured as a foundation, not only the usual courses in mathematics, mechanics, physics, and chemistry, but in addition a thorough training in general engineering studies. As he himself expressed it, "the student should first be made an engineer, and afterward an electrical engineer." This was by no means the general opinion at the time; in fact, Professor Trowbridge was probably the first to clearly and fully appreciate what the profession of electrical engineering was destined to become. At most institutions the policy of grafting a few electrical studies on courses of general science, or on courses in mechanical engineering, marked the extent of the effort made to meet the demand. The establishment of a complete and well-balanced curriculum in electrical engineering from the beginning was a new and radical departure, in which for many years Columbia, and one other institution, stood alone. In practically all other cases the

instructors, the laboratories, the apparatus, and the in- 1894
struction formed an integral part either of a department of physics, or of a department of mechanical engineering. At Columbia special laboratories for instruction in electrical engineering were installed from the beginning, two additional floors being built for the purpose over the existing power house at the 49th Street site.

Both the two year and the four year courses were successful from the first, both in reputation gained and in the number of students attracted by the instruction offered. The standing of the graduates, and of the course of study, is as high as that of any in the country. It may fairly be claimed that the tendency at other institutions is to follow the lead of Columbia, and to modify their courses in electrical engineering, and to develop them along the lines originally formulated here. At Columbia the general character of the course has remained substantially the same as that originally planned, though at the same time the newer branches and more recent developments both in theory and practice have been given due place and prominence. The removal of the University to the new site in 1897 made possible many additions and improvements in laboratory equipment by reason of the greater space available.

In addition to its special work of training electrical engineers the department offers instruction and laboratory practice to students in the mechanical, civil, and mining engineering courses and to students of chemistry and metallurgy.

Instruction in mechanical engineering at Columbia has been of gradual growth. Beginning in the early years of the School of Mines with a single course of lectures on machines and the purchase of a testing machine by Professor Francis L. Vinton, it received its first forward impulse on the reorganization of the department of engi-

1904 neering in 1877 in the appointment of Frederick Remsen Hutton, the present head of the department, as instructor in mechanical engineering. Lectures were delivered on power-plant practice and power transmission, and a few years later in locomotive design and general railroad engineering and in properties of materials. In 1889 the Emery and the Riehle testing machines were added to the equipment of the department, and in 1890 an assistant in mechanical engineering was appointed to take part of the instruction and assist in the laboratory work. In 1894 the first beginning of a mechanical laboratory was created, by gifts of experimental steam engines, condensers, and weighing apparatus. The use of this laboratory at the beginning was mainly by graduates, as no provision for laboratory work was then made in the regular courses.

On the removal of the University to the new site a course in mechanical engineering was created, and the full equipment of the new laboratories was begun with three munificent gifts, — the Worthington hydraulic laboratory in 1897, followed in 1899 by the Allis triple expansion engine and three-stage air compressor, and the Baldwin locomotive "Columbia." Among recent additions to the equipment may be noted a number of gas and oil engines, which permit special emphasis on this type of motor.

The new course began with the enrolment of 14 students in October, 1897, since which time the numbers have rapidly increased from year to year to a total of 103 at the present time.

The shop work required of all students in the early years of the course is done in the woodworking, pattern making, and machine shops, and forges of Teachers College under a professor and three instructors. The drawing for all engineering courses is under the charge of this department and demands the services of an adjunct professor and two tutors. The engineering design for mechanical students is conducted by an adjunct professor and a tutor.

while the work in the mechanical laboratories demands 1893
the services of an adjunct professor, an instructor, and two assistants. In all, the force of the department includes two professors, three adjunct professors, four instructors, three tutors, and three assistants.

In the fourth year the students are given the choice between three alternative courses of study : 1, the power-house option; 2, the locomotive option, and 3, the marine option which are arranged for those who desire to specialize in one or another line of work. The fine equipment of the shops and laboratories makes possible a large amount of useful laboratory work in course, and most important research work by advanced students.

A course for the degree of Civil Engineer was established in the School of Mines in 1869. At first it did not differ materially from the course in mining, and many students took both degrees. The course of instruction, as it exists at the present time, dates from the appointment of Professor Trowbridge to the chair of Engineering in 1877. After the death of Professor Trowbridge in 1892 a new chair of Civil Engineering was created and filled by the appointment of William H. Burr, professor of Engineering at the Lawrence Scientific School, a graduate and at one time professor at the Rensselaer Polytechnic. At present the department of Civil Engineering requires the services of two professors, an instructor, a tutor, and an assistant.

Shortly after the death of Professor Trowbridge, the department of Engineering was abolished, and in 1893 separate chairs of Civil Engineering, Mechanical Engineering, and Electrical Engineering were created. This important change marked the beginning of a period of growth and development in all these departments, and in none more than in the new department of Civil Engineering.

1904 Under the old organization, in which the unity of the different engineering professions was emphasized, much that was valuable was accomplished, especially in the development of the newer lines of engineering work, which were from the beginning established on a solid foundation of engineering studies. At the same time, the older profession of civil engineering did not receive that special attention, nor did it attain that development in detail, which was demanded by the increasing call for efficient professional instruction of the highest grade. From the standpoint of the civil engineer, many of the subjects leading to that degree, administered as parts of a general engineering course, were of necessity more or less elementary, and in many cases insufficiently developed to meet the exacting demands of modern engineering practice. Again, under the old organization the staff was not large enough to cover the ground completely, and many important civil engineering subjects were of necessity omitted from the curriculum.

The first efforts in the organization of the new department were directed to secure a development along the lines of advanced professional work, fundamentally reconstructing those courses taken over from the old curriculum and supplying a considerable number of wholly new subjects. This work of reconstruction was radical throughout the department, but the endeavor was to accomplish it without doing violence to the traditions of the institution or to break continuity in that part of the educational training found in what was then called the School of Mines.

The main idea running through this organization of the department was the historical conception of the profession of civil engineering as embracing all engineering not military or naval. Under this view, civil engineering is not a specialty but the main trunk or stem of all engineering involved in the business of civil life. This in no manner trenches upon the development or growth

THE SCHOOL OF MINES BUILDING, 1884-1897

of the great specialties which have assumed such impor- 1904
tance within the past two or three decades. It simply means that the department of Civil Engineering at Columbia University has been organized on a broad and substantial recognition of the fact that the professional civil engineer should have an educational training so comprehensive and thorough in character as to include all the fundamental principles of engineering science. This organization has been so completed, and the curriculum so formulated as to give all students pursuing the course in civil engineering a thorough grasp and command of the general principles of engineering science, not only in its applications to construction, but also to the design and operation of machinery, to power plants, both electric and steam, and to the organization and direction of all classes of engineering enterprises. It has been and is the purpose to base the educational training of students fundamentally upon a thorough knowledge of general principles, and then to develop the application of them to typical subjects of engineering practice in all the fields of structures, transportation, and the manufacture, distribution, and application of power, as far as it is practicable to do so in the professional school.

In this instruction it is appreciated that the professional school has certain peculiar functions or responsibilities to discharge, but that no young man can be made a finished practitioner by such instruction. Indeed his complete educational training must consist first and imperatively of that educational preparation which he can obtain only in the professional school supplemented by the influences of the first few years of his practical life in developing his judgment and those other qualities of administrative character which give him executive capacity.

The first year of the present course in civil engineering is devoted largely to general mathematical and physical subjects, chiefly preparatory to the more technical work

1904 of the subsequent three years, although the students devote considerable time to surveying and shop work. The second year of the course may be considered as being devoted practically to technical or professional subjects, although it is largely preparatory to the more advanced professional work of the third and fourth years. During this year such subjects as calculus, mechanics, road engineering, elements of electrical engineering, and other subjects of a similar general character are either begun or completed. The first extended application of mathematical and physical studies to engineering work is found in the third year, during the first half of which advanced analytical mechanics is completed. Such subjects as the resistance of materials, masonry structures, thermo-dynamics, electrical engineering, engineering of power plants and other truly professional subjects of study, find numerous and extended applications to practical engineering problems. Similar general observations apply to that portion of the curriculum covered by the work of the fourth year. In this year actual design work is extensively done together with the completion of working drawings and specifications for bridges and buildings, hydraulic and public works, the steam-engine and accessories, pumps and pumping engines, advanced railroad work and sewer systems, and a considerable number of other classes of engineering structures and machines, supplemented by a graduating thesis to which a large amount of time is devoted. In this thesis work it is the purpose to throw the student as much as possible upon his own resources in the design or other treatment of some special piece of engineering work for which he himself must secure all data, make trips of observation to similar works in progress, complete working drawings and specifications, and perform such other work as may be required of identically the same character as that done in the best engineering offices of the country.

In addition to this work performed at the University 1904
during the academic year, the department conducts an admirably equipped summer school of surveying during the three summer months on a tract of about six hundred acres of land owned by the University at Morris, Connecticut, known as Camp Columbia. Permanent buildings and other improvements, including an excellent water supply, have been constructed at this summer camp, where all students taking the courses in civil or mining engineering must spend a number of weeks each summer vacation in actual surveying operations.

The summer camp has a large outfit of surveying instruments so that the classes may be divided into very small squads, usually not over three men, resulting in a maximum of individual work and personal training. Each student has in all fifteen to sixteen weeks' field work divided between the three summer vacations, in which time he executes a large number of surveys, and acquires a high degree of skill in the adjustment and use of surveying instruments, and in the conduct of topographical and engineering surveys, and the computations and mapping incident thereto, including plans and specifications for railroad work. The surveying course is unique in the high degree of accuracy required in all surveying work. In the earlier surveys executed by each student all the work is done upon areas covered with fixed monuments, the relative position and height of each of which is accurately known. The student's work is thus checked on every individual measurement of distance, direction, and elevation, and he is forced to use the greatest care, and to employ only correct methods of work from the very beginning.

In this manner each student receives not only instruction but actual experience in the field in every branch of engineering surveying, from simple pacing surveys to an elaborate and complete railroad survey, including final

1904 location of line and structures. These railroad lines, as well as other surveys of the summer school, are necessarily extended far beyond the limits of the University's property, so as to secure sufficient length of line and ample extent of country for all the practical operations contemplated. It is confidently believed that no other institution, either in Europe or in this country, affords equal facilities for practical field work so extensively developed or so efficiently conducted as at this summer school.

The subject of railroad organization and administration, including all the various operations of the great field of transportation, are receiving special treatment and careful development in the department. The study of subjects included under instruction in railroad work is conducted closely along lines of actual railroad operation exhibited by the great trunk lines of the country, so that every student taking this course is brought directly in contact with all the main features of railroad construction, maintenance, and operation, as found in the best railroad systems of the present time. This branch of engineering work has made great advances since the creation of the department, and that fact is recognized in the instruction given.

The general plans of instruction are those which have grown up naturally under the test of years of experience, and are shaped so as to convey to the student the desired information in the different subjects of the course with the greatest possible efficiency attainable. A limited amount of lecture work is given where that method may be advantageously used, but the fundamental idea is to stimulate the student to active work with the least amount of unproductive effort. In general, the classroom exercises are intended to avoid the objectionable features of pure lecture work, and to render unnecessary the labor of taking other than occasional notes, by substituting questions or other similar means of stimulating productive thought by the student either in the demonstration of

principles or in their applications to definite engineering 1904
works or problems. This classroom work is supplemented by extended exercises in the application of the general principles discussed and established in the classroom to a great variety of actual designs or to problems leading to actual design. While the solution of many of these practical problems, involving the application of general principles of engineering science, requires computations only, a large number of them require completion of actual working drawings, such as are placed in machine shops in practice for the manufacture of either machines or structures, or which may be used in the field for the construction of railroad works or any of the class of large public works for cities or towns, or for even larger national works. These general plans of instruction enable the student to acquire the greatest amount of professional information with the least waste of effort and in the most direct and efficient manner.

The department also supplements classroom work by extensive laboratory operations which in the first and second years of the course are chiefly conducted in the physical and chemical laboratories available to its students. The purely departmental laboratories include all branches of cement and road materials testing, the testing of all kinds of structural materials, such as artificial and natural stones, iron, steel, timber, and concrete-steel. The students are also given series of practical operations in various lines of hydraulic work, steam-engines, pumps, and electrical machinery.

The complete educational procedure, therefore, is symmetrically developed and completely rounded in every feature. There has been an earnest desire to omit no part of the professional civil engineer's educational training, either purely physical or practical, but to finish each of its graduates in the most complete and satisfactory manner for the beginning of his professional career. The

1904 fact that many inquiries for young engineers are constantly made to the department to which no response can be made, no graduates, as a rule, being without positions, seems to indicate that the end has generally been to a reasonable degree attained.

The School of Chemistry offers three four-year courses of a professional character in analytical chemistry, in organic chemistry, and in industrial chemistry. The subjects taught are substantially the same in all three of these courses, the chief difference is in the distribution of hours in the Analytical, Organic, and Industrial laboratories. The department of chemistry also has charge of all chemical instruction in the University, in the College, in the School of Mines, in the School of Engineering, and in the graduate School of Pure Science. The training of professional chemists in the School of Chemistry is thus but a part of the larger work of the department.

Like the other professional schools, the School of Chemistry had its origin in the School of Mines, and has been under the direction of Professor Charles F. Chandler from the beginning. It was set off from the School of Mines in 1896, but remains under the control of the Faculty of Applied Science. In 1864–65 Professor Chandler had two laboratory assistants, to-day the department includes three professors, three adjunct professors, three instructors, eleven tutors, and five assistants. Until 1897 the work was done in three laboratories. To-day the chemical department has twelve laboratories, occupying the greater part of Havemeyer. A chemical museum containing over ten thousand specimens has been established to illustrate the instruction given in pure and applied chemistry.

To return to the School of Mines itself; the main purpose of this school is to train men to undertake the development of mineral properties, and to manage mines

and metallurgical works. This training must be a broad 1904
one, as the duties of the mining engineer involve application of the sciences of mineralogy, petrology, and geology, in both the surface and underground exploration of mineral deposits, of civil, mechanical, and electrical engineering in the construction and operation of mine plant and mining machinery, and of dressing, milling, and metallurgy in the treatment of the products of the mine. These subjects require that the student shall be well grounded in mathematics, physics, mechanics, and chemistry, and that in each the instruction shall be thorough and complete. The course is, therefore, a very broad one. It is manifestly impossible in an article of this character to go into details of the scheme of instruction, but some of its salient features may be emphasized, which will serve also to illustrate the general character of the work done in the associated schools.

Great stress is laid upon laboratory and field-work training. The chemical laboratories for qualitative and quantitative analysis and assaying, the mineralogical and geological laboratories, the physical laboratories, and the drafting rooms are among the finest in the country. Laboratory instruction in chemistry and assaying extends through three years — in drafting, through all four years. Laboratory instruction in mineralogy and geology extends through three or four years, and includes half a year's work with the microscope on thin sections of minerals and rocks. This not only fits the student for subsequent studies in his professional practice of the phenomena of ore deposition, but also furnishes an admirable introduction to the microscopic study of metals and alloys, which is included in the required work in the metallurgical laboratory later.

An important feature of laboratory instruction in the School of Mines is the prominence given to work in the engineering, mining, and metallurgical laboratories. In

1904 these the student continues the work begun in the chemical and physical laboratories, and is given opportunity for the experimental demonstration of the physical, mechanical or chemical laws and general fundamental principles underlying any given branch of engineering. These laboratories are also equipped to train the student in the making of scientific tests of engineering materials, and working tests of machines and processes of ore treatment, thus preparing him as far as is possible in the school for work that he will be called upon to do as an engineer.

Among these are the testing laboratories for determining the strength and other physical qualities of engineering materials; the mechanical laboratories equipped with large and small steam engines, gas and petroleum engines, air compressors, pumps, and auxiliary apparatus; the electrical laboratories with direct and alternating current generators, motors, dynamos, and transformers, arc and incandescent lighting apparatus, and other necessary apparatus; the metallurgical laboratories equipped with large and small furnaces heated by fuel, gas, or electric current, and with apparatus for illustrating lixiviation, precipitation, chlorination, amalgamation, and other chemical processes; and finally the mining laboratories equipped with small and full-sized crushing, screening, and sampling apparatus, and small and large concentrating machines of different types.

All these laboratories are furnished with the necessary instruments of precision for making tests; and the mining students are required to perform for themselves a series of experiments in each laboratory designed to supplement the classroom and field instruction and give them the necessary training of hand and eye required for successful laboratory manipulation.

Practical instruction in summer courses is developed at Columbia to an extent not found elsewhere. Prominent among these are the summer courses of surveying, courses

given at Morris, Connecticut, which have been already 1904
mentioned.

The summer course in practical mining is another important feature of instruction which originated at Columbia twenty-seven years ago, and which since has been added to the curriculum of other mining schools. This school of observation has the same relation to the study of mining as clinical instruction and hospital practice to the study of medicine and surgery. The programme at the summer course includes detailed studies of the operations of mining, and of mine equipment, underground and on the surface, and of the problems of mine organization and administration. The work is done at some prominent mine selected for the purpose, and the students are assigned each day special subjects of study, and are put in the charge of skilled miners or mine officials, in small squads of two or three men, for the accomplishment of their assigned work. During the day they are frequently visited by competent instructors, and at night they are expected to hand in detailed notes and sketches of the subject assigned for the day's work, which notes are closely scrutinized and criticised by the instructors in charge. In this and similar ways it is attempted to develop the student's powers of observation, and to encourage him in habits of careful and critical study, and above all of making intelligent notes and sketches of a character likely to be useful to him afterwards. Incidentally the student accumulates much valuable information as to the geological occurrence of minerals, and regarding the details of mining practice and the problems of mine administration in the mining region visited, which add much to the value of the lectures on mining and allied subjects attended by him when he returns to the School of Mines for the work of his fourth and final year. In the words of one of the professors "the students seem five years older when they come back to us in the fall after

1904 attendance at one of these summer schools." As far as possible the summer courses have been held in the older and better-developed mining regions, that the students may have the advantage of studying the best and most-approved practice. Summer sessions have been held in the bituminous and anthracite mines of Pennsylvania, at iron mines in New Jersey, New York, and Michigan, at copper mines in Michigan and Montana, at lead mines in Missouri, at mines of gold and silver in Colorado and Utah. This summer (1904), through the liberality of Mr. George Crocker, a joint summer mining class with students and instructors from Columbia, Yale, and Harvard Universities and from the Massachusetts Institute of Technology, was held at Silver Plume, Colorado, under most advantageous conditions. A portion of the Dives Pelican mine was leased by the school and operated with a small force of skilled miners, and equipped with modern mining machinery. The students, under the direction of skilled miners, were required to take part in the actual operations of mining. In addition they made underground surveys, took samples from the mine workings, from the stopes, and from the ore dumps, and made critical study of milling operations, taking samples by which to determine the efficiency of the work done. Many things were thus included in the course of instruction which had not before been attempted, and this summer session marks a decided advance in this field of mining education.

Summer courses in geology for the benefit of students in mining are held each year, at which the students are instructed in methods of geological field work and are required to construct maps and geological sections from their notes.

Summer courses in metallurgy are likewise held each summer at important metallurgical works in different parts of the country, for the practical study of the metallurgy of iron, steel, copper, lead, zinc, and gold and silver.

THE SCHOOL OF MINES BUILDING

Erected 1904

1904 While much time is thus given to practical training in the laboratories, in the field, and at the mines and metallurgical establishments, great care is taken to subordinate this instruction to the regular classroom work, and especially in subjects which are fundamental. In all such subjects a high standard of accomplishment is rigorously maintained.

In the summer preceding the final year of the mining course the students are assigned, as the subject of their graduation theses, the problem of the opening and development of a mine, which is supposed to be located in some well-known mining district, and for which certain definite conditions as to size and character of ore body, amount of water to be pumped, and quantity of ore to be mined are assumed. During the summer the student visits the assigned region and studies on the spot the conditions under which mining is there conducted, and obtains data for his thesis work. During the winter he decides upon the proper method of opening, developing, and working the property, and makes estimates of the plant, machinery, and capital required, and the probable cost of working and profits obtainable. In addition to this he is required to work out in detail certain portions of the proposed mine plant, and to prepare a series of working drawings, bill of materials and specifications therefor, computing carefully the strength of all the parts. This work and the preparation of the thesis is done under the supervision of competent instructors, and constitutes both a review and a series of practical applications of the preparatory studies of previous years, and gives the students an opportunity to discover and remedy weak places in their professional training, and gives them at the same time some degree of confidence in their ability to work out similar problems later. It is believed that the scheme of instruction developed at the School of Mines during the forty years of its usefulness accomplishes the follow-

ing important educational results for the students com- 1904
pleting the course: —

1. A broad and thorough fundamental training in mathematics and science.

2. An engineering education of a high order.

3. An exceptionally complete training of hand and eye in laboratory and field work.

4. The special professional training in geology, mining, and metallurgy necessary for the mining or metallurgical engineer.

That the education offered preserves a fair balance between the exacting requirements above outlined seems to be indicated by the professional success of the School of Mines graduates, and by the large and increasing numbers of students coming to Columbia from all parts of the country, and from abroad.

The School of Mines and associated schools are fortunate in the location and environment of the University, which draws its students from the section of the country possessing greatest educational opportunities. This has enabled the Faculty to maintain high requirements for admission, and to exact a high standard of accomplishment from its students. The excellent material with which it has had to deal, as well as the quality of instruction given, is shown in the large degree of professional success attained by graduates of the School of Mines and associated schools, who are now in charge of large industrial enterprises of important public works, and of successful mines and metallurgical establishments in all parts of North and South America, from New Brunswick and Alaska to Chile and Peru, and in Asia, Africa, and Australia.

The alumni of the School of Mines and associated schools have also, directly and indirectly, exerted much influence on the development and educational policy of

1904 the institution, in which they have at all times, exhibited most loyal and hearty interest.

In 1893 the alumni raised the sum of $10,000 to establish the William Petit Trowbridge Fellowship. The income of the fund is to be not less than $500 a year and is to be paid to the widow of Professor Trowbridge during her lifetime. Since 1898 an equipment and endowment fund of nearly $30,000 has been raised for the departments of mining and metallurgy, of which alumni of the School of Mines have contributed over one-third. Mr. William C. Illig of the class of '82 bequeathed $2000 to establish medals to be awarded to the most proficient members of the graduating class, and Mr. B. B. Lawrence of the class of '78 maintains a scholarship in the School. Another scholarship in memory of the late Marcus Daly, of the annual value of $1000, has been established in the present year for students from Montana who have either worked in the mines of that state or are the descendants of miners. In addition to these, the University offers 35 scholarships each of the annual value of $250, the amount of the tuition, and by the bequest of Edward A. Darling a prize of $40 for the most faithful and deserving member of the graduating class in Engineering was established in 1904.

At Commencement, 1904, the President made the welcome announcement that through the generosity of Mr. Adolph Lewisohn, President of the United Metals Selling Company, a much-needed School of Mines Building is to be erected, at a cost of about a quarter of a million dollars, and is probably to be ready for occupancy in October, 1905. This new building will not only add greatly to the facilities of the departments of Mining and Metallurgy, which will occupy it, but it will free space in the Engineering Building and in Havemeyer that can be most profitably used by the other departments under the Faculty of Applied Science.

HENRY SMITH MUNROE.

IV. — THE SCHOOL OF ARCHITECTURE

The five years from 1876 to 1881 constituted a period memorable in the annals of American progress. Peace, prosperity, and growing wealth were developing new tastes and furnishing the opportunity and means for a new artistic activity, for which the Centennial Exhibition at Philadelphia had prepared the way. Museums and schools of art were multiplied, and the tide which carries so many Americans to Paris to-day was beginning to make itself felt. The only schools of architecture in the country at this time were that of the Massachusetts Institute of Technology at Boston, founded by Professor William R. Ware in 1866; that of Cornell University, founded in 1871 by Professor Charles Babcock; and that of the Illinois Industrial University, as it was then called, at Champaign, Illinois. The founder of the last school, Professor N. Clifford Ricker, is still at its head, and it is a striking illustration of how recent is the development of professional education in architecture in the United States, that the founders of all three schools are still living.

But these three schools, two of them in rural towns, remote from the great centres of architectural interest, were quite unable to supply the growing demand for trained architects and draughtsmen. Accordingly in 1880 the Trustees of Columbia College, as this University was then called, began to consider the advisability of establishing a truly metropolitan school of architecture in connection with the so-called School of Mines — the present Faculty of Applied Science. Mr. F. A. Schermerhorn was the leading advocate among the Trustees of such a school. Against the hesitation of his more timid colleagues he

1880 brought to bear his own enthusiasm, pointing out the growing dignity and importance of architecture and the splendid opportunity before them to supply a real and urgent need. That the proposed school should be attached to the technological and scientific faculty known as the School of Mines was accepted as a foregone conclusion. This decision was probably the only one which would have made the school of architecture possible ; the conception of a broadly organized faculty of fine arts under the University was far beyond the scope of the plans of those days. Mathematics and science enter so largely into the work of the trained architect that it was at least highly convenient to attach the new school to a faculty which was already offering efficient instruction in these branches. Accordingly the new school was launched as a course or department of the School of Mines.

At this time Professor Ware, who had founded, and for fifteen years had been the head of, the school of architecture of the Massachusetts Institute of Technology, had but recently resigned his chair in that institution to devote himself to the active practice of his profession in Boston. As the founder and director of the first and most important American school of architecture, combining in his own person the finest intellectual and artistic culture of New England with a wide professional and educational experience, he was clearly the one best qualified to undertake the heavy but inspiring task of building up the new school, and the Trustees invited him in 1881 to assume the duties of professor of architecture in the Columbia School of Mines. The invitation was accepted by Professor Ware, upon the express stipulation that he should have an absolutely free hand in organizing the school and in conducting its affairs during its earlier and formative years. It is evidence of the far-seeing liberality of the Trustees that they acceded to these conditions, so that Professor Ware was wholly untrammelled in carrying out

his ideas and giving to the new school the character he 1881
wished it to have ; except, of course, so far as its subordination to a scientific faculty imposed restrictions which could not be escaped.

The new school of architecture was opened in the fall of 1881 with four students, in a gloomy, shabby upper room in the ancient building, known in its later years as the "Maison de Punk," on the College property at 49th Street, between Madison and Fourth avenues. During the first year Professor Ware had no assistants, and as the studies of the course were largely mathematical and scientific, and the students few, it was not, perhaps, difficult for Professor Ware to give without aid the professional instruction required. Thus the school was not only Professor Ware's school, so far as it was an architectural school, it was chiefly Professor Ware himself. This personal character of the school, the close and intimate relations which were cultivated between master and pupil, and the dominance of Professor Ware's individuality marked the school, not only during its infancy, but throughout the whole twenty-two years of his connection with it. It was, no doubt, one of its most valuable assets.

In the fall of 1882 the writer of this sketch was invited to assist Professor Ware in the preparation of material for lectures on the history of ornament, and later to deliver the lectures. Thus began a connection with the school which has continued for twenty-two years, during twenty-one of which the writer was associated with Professor Ware successively as assistant, instructor, and adjunct professor. For some time the courses administered by these two were supplemented by lectures given by special lecturers under temporary appointment. Other members were, however, added to the staff as time went on, until in 1898 there were nine persons giving instruction in the school, comprising one professor, two

1884 adjunct professors, an instructor, and two "lecturers" giving their whole time, and a tutor, an instructor, and a "lecturer" giving partial time, to the school.

In 1883 a new wing was completed for the School of Mines, and the Department of Architecture moved into new quarters on its fourth floor, which seemed palatial by contrast to the gloomy and shabby rooms under the roof of the Ionic portico of the antiquated "Maison de Punk." The first class of five members was graduated in 1884, and under more favorable conditions the school increased with great rapidity in numbers as well as in efficiency. Its equipment, for which the new rooms afforded for the first time proper accommodation, was rapidly enriched by a series of generous gifts from Mr. F. A. Schermerhorn, and it was especially well supplied with books, photographs, and slides, wall-diagrams, and a fine series of drawings from the École des Beaux-Arts at Paris, which were framed and hung in the rooms "*pour encourager les autres.*" These drawings were the despair as well as the inspiration of the earlier students. It was hard to believe that such artistic proficiency was within their reach ; and, indeed, it was not attainable in the four years' course as it then was, though some of the drawings seem antiquated now, even to the undergraduate. Times and conditions have changed, and when one sets the best work of the last graduating class beside that of the class of '84 or '85 or even '90, one obtains a measure of the progress of the school since then.

In 1881 the first year students in architecture had no architecture at all. Their time was wholly taken up with mathematical and scientific studies in common with the students of engineering and chemistry. Very early, however, Professor Ware began that process of gradual sundering of the ties that bound architecture to the schools of science, and I well remember the triumph we felt when, for the first time, the first year students began

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coming to us for the second half of the year. On the 1891
first day some twenty of them poured into the draughting room, headed by a very fresh, curly-headed youth who announced very decidedly that they were "the architects," — a statement whose confusion of the *in posse* with the *in esse* was the occasion of many gibes from the upper classmen. The next year we got our hands on the young men from the first day of their first year; and thereafter, little by little, the chemistry and physics, the botany and hygiene, the sanitary engineering and the economic geology, which had consumed many hours a week through all the years of the course, were crowded out or dropped, and the time thus gained devoted to drawing and design, to specifications and building materials.

A still more radical change, and one even more strongly opposed in the faculty meetings, was finally consummated by Professor Ware in 1891. This was to take over into the school (or department, as it then was) all the mathematics of the course, hitherto administered by the Department of Mathematics of the School of Mines. The object was to reduce the time devoted to mathematics by specializing the instruction, omitting much that was irrelevant to architecture, though essential to the discipline of the engineers. Mr. Frank Dempster Sherman, a member of the first class graduated from the department, and a mathematician of singular clearness of mind, was made instructor in architectural engineering (as the mathematics of the course was collectively called), and later adjunct professor of architecture; and by him has been given for thirteen years all the instruction in analytics, calculus, analytical mechanics, descriptive geometry, and shades and shadows. Successive classes have testified to the efficiency of his training and the remarkable clearness of his explanations. If the students of architecture covered less ground than the engineers, they had their mathematics at least as well in hand; some said better.

1891 The conflict waged over these changes, which were not effected without vigorous opposition, indicates the position which architecture in those days held in the minds of educated men generally. It was an inferior, nondescript branch of engineering, involving a smattering of several sciences, but exhaustive in none. The professors of chemistry, geology, and botany each felt that more, not less of the architectural students' time should be devoted to his particular branch of science, and looked upon a profession which sought to cut down his own share in its training as a sort of mongrel among the thoroughbreds. That it is an art, primarily and fundamentally dealing with plastic form, light, shadow, and color from the point of view of beauty, and that all its scientific connections and attachments were only means to artistic ends, subordinate always to the great aims of artistic plastic design, — this was a conception quite foreign to their ideas, and they could not at first grasp it. But Professor Ware saw clearly the end he had set before him, and with the greatest good nature, simplicity, and clearness made known from time to time the changes he desired, and one after another secured them. The scientists sometimes shrugged their shoulders, and sometimes protested; but with the largeness of mind of the true scientist who recognizes the specialist in other fields than his own, they always ended by voting the changes.

But it must not be thought that in dropping out the general chemistry, physics, hygiene, and botany from the course, it was intended to ignore these subjects in the architectural training offered by the school. Two new and comprehensive courses were organized into which all these subjects, thus dropped as distinct studies, entered more or less largely. To these courses the titles of Specifications and Building Materials were given, and under them the chemistry and geology, the constitution and physical properties, the production and preservation, the growth and decay, and the proper use of and methods of

specifying all the chief materials of construction were 1891
treated in lectures and other exercises. Mr. Charles P. Warren, a graduate of the class of 1890, was engaged as tutor in architectural construction, to conduct this double course, which he has made unique in its conciseness, thoroughness, and (if I may coin a word) its up-to-dateness. I know of nothing so efficient and complete in any other school, even disregarding the small total number of hours it occupies in the course.

I have spoken of the mathematics and their transfer to Professor Sherman's hands in the Department of Architecture. Following the same principle of concentration and specialization, Professor Ware secured the similar transfer of the work in descriptive geometry and stereotomy, in graphical statics and strength of materials, so far as the students of architecture were concerned, from the hands of the engineering instructors to those of special instructors in the Department of Architecture, Professor Sherman taking the descriptive geometry and stereotomy, while Mr. G. T. Snelling, a graduate of the Massachusetts Institute of Technology and a returned student of the Beaux-Arts in Paris, undertook the graphical statics and strength of materials. These were woven into a new course of architectural engineering, in which the theoretical discussions of applied mechanics were reduced to a minimum, and their applications to architecture especially insisted upon and discussed in a series of problems, partly of original design, covering all the typical cases of the post, lintel, arch, truss, vault, and retaining wall. This has also been developed into a remarkably thorough and efficient course of fundamental value to the practitioner in New York under modern conditions.

The historical and critical side of the architect's training Professor Ware regarded as of fundamental importance, and it was developed in the Columbia school and has

1891 always been maintained, upon lines which reveal the educational resourcefulness and discernment of their author. The history of styles and constructive systems was made a means of both professional and intellectual culture, by courses of illustrated lectures occupying three years and covering the ancient, mediæval, and Renaissance periods and styles, with parallel courses on the history of ornament. But since no mere lecture course can supply the discipline of individual research, or bring the student into intimate acquaintance with both the monuments themselves and the literature which treats of them, Professor Ware devised the highly efficient system of exercises in historical research which has ever since distinguished the Columbia course in architecture. In the second and third years the afternoons of six weeks of the second term are devoted to a sort of seminar in the library, each student being given a special topic for the week, with references to important works, and being required to prepare a written report upon it, with abundant illustrations — tracings, wash-drawings, pencil and pen sketches, or plans and elevations. This sort of study not only exercises him in composition and draughtsmanship; it compels him to resort to the books and to learn the aspect of the great monuments of the various styles; he becomes acquainted with what, in the lectures, were hardly more than names, and studies them as he never would were the required work less definitely planned and organized for him.

But all this work — mathematical, scientific, structural, and historical — is preliminary to the work in drawing and design. The object of the course is not to produce mathematicians and engineers, but to train architects, designers of buildings, artists in structural form. The work thus far described is scientific, precise, intellectual; the object of the training in design is artistic, and the vehicle of artistic expression is drawing. This department of work was the weakest side of the Columbia course

in its early years, and the reason is obvious. The position 1891
of the School of Architecture as a mere department of a school of science kept it under the domination of the scientific ideas and ideals which rightly controlled the Departments of Chemistry, Mining, and Engineering. The artistic side of the architect's education was wholly overshadowed by this scientific environment, and scant time was allowed in the curriculum for either the drawing or the design. Moreover, the buildings on 49th Street and Fourth Avenue contained no suitable north-lighted room for drawing from the cast and from life, and the wonder is that without a drawing-room or casts, the students should have acquired the marked proficiency which they did in drawing. Intelligent methods and ingenious exercises devised by Professor Ware and by those under him in part made up for the woful deficiencies in equipment in this department.

The instruction in design was after the first year for a long time in the hands of the writer, who did what he could with the scanty allotment of hours at his disposal. Little by little this allotment was increased, and as the number of students also grew, the work became more and more interesting by the emulation of numbers. From the first the extraneous stimulus of awards and prizes, indeed, of all competitive honors, was excluded. Professor Ware believed that the enthusiasm of competition for honors was too often factitious, selfish, and hollow, aiming to reach superficial standards, and accompanied by evils greater than the gain. He argued that true enthusiasm should spring from the inherent interest of the work, and to a considerable degree justified his argument by the results. The school also refused to be carried away by undiscriminating admiration for the methods of the Paris École des Beaux-Arts, though seeking always to profit by its excellences so far as they could be adapted to our methods and ideas. Moreover, draughtsmanship was

1894 always treated as secondary to design, and detail to composition. Professor Ware cared little for brilliant and showy drawings as results of the work in design, but a great deal for evidence of serious study, intelligent thought, sound knowledge and refined taste, and believed that these could often be as well shown in a brown-paper study as in an elaborately rendered drawing. This had its drawbacks, for the public made unfavorable comparisons between the work of the Columbia men and the more attractive and finished displays of other schools, and it became necessary to show that Columbia students could "render" artistically as well as compose an effective design. Mr. Snelling, more recently from Paris than Mr. Hamlin, was accordingly given the third year work in design; and in 1894, his time being too much taken up with his growing private practice to continue this work, it was intrusted, together with the more elementary second year design, to Mr. W. T. Partridge, a former student in the school who had later won the Rotch Scholarship and spent some years in Paris. Professor Hamlin continued to administer the fourth year design, but in 1898 he was given an assistant in the person of Mr. H. F. Hornbostel, of the class of 1891, a brilliant designer, since noted as the architect of the new East River bridges, who for five years efficiently conducted the actual work of instruction and criticism in the advanced design.

In 1889–1891 the School received two important gifts in the establishment of the Columbia and McKim Traveling Fellowships, the first founded by the Trustees in recognition of Mr. Schermerhorn's generous gifts to the school; and the second endowed by Mr. C. F. McKim. These fellowships are awarded in alternate years to graduates of the School under thirty years of age, upon a competition in design, and the winner is required to devote the income to foreign travel and study. These benefactions have been of great value both in their influence on the under-

graduate design and in the opportunity provided for 1897
capable young men to secure the advantages of post-graduate study abroad. A fourth traveling fellowship, available every fourth year, was established in 1898 by the bequest of the late Willard B. Perkins.

Meanwhile the persistent pressure exerted by Professor Ware had gradually forced out of the curriculum, as already related, many subjects and courses that seemed superfluous or irrelevant, and the whole curriculum had been revised and condensed, as it were, giving to design and drawing more nearly the time and attention they deserved. Particularly the fourth year had been in great part freed of lectures, and as far as possible devoted wholly to drawing and design. The fourth year men took more and more the rank and standing of postgraduate students, and their work in design gained proportionately in quality and amount.

Thus by 1897 the school of architecture had secured a place by itself under the Faculty of Applied Science, and had become an independent school, save for its administrative connection with that faculty. It stood also alone among the schools of architecture of the United States in its delivery from what Professor Ware was wont to call "the tyranny of mathematics" as taught to engineers and professional scientists, and in the degree of its emancipation from the dictation of a scientific faculty. It administered a course of architectural training not yet ideally perfect, but in the main well balanced and sound, the full value of which did not always appear until three or four years after graduation. Men from other schools were sometimes accounted in the down-town offices the superiors of the Columbia draughtsmen, but a few years of professional experience generally served to bring out the underlying soundness and breadth of the Columbia training and its superiority as an equipment for the real career of the architect. And it was noticed that in post-

1897 graduate competitions and in the work done by the American students in Paris, the Columbia men took at least their full share of honors.

By the time, then, that the school moved to its new quarters on the heights of Morningside, it stood in the front rank among American schools. Its numbers had risen from the five of 1881–1883 to 53 in 1887, 76 in 1899, and 96 in 1897, making it at that time the largest school in the country. Its staff had increased from one professor in 1881–1882 to eight members in 1897, — one professor, two adjunct professors, and five instructors bearing various titles (curator, instructor, tutor, assistant, lecturer). The new quarters were as marked an improvement over the old ones on 49th Street as these — long outgrown and overcrowded — had been over the dingy room in the "Maison de Punk." Light, air, space, and deliverance from the noise of the railway on Fourth Avenue, — these alone were a great boon. But in addition there was found room for a fine departmental library and a well-lighted exhibition hall, and for the proper display of the building materials and appliances collected by Professor Ware and Mr. C. P. Warren, and the fine collection of casts presented in 1891 by Mr. C. F. McKim. In addition there was provided for the first time a fairly suitable room for drawing from the cast and from life, and the course in drawing profited accordingly. The favorable results of the transfer to these new and attractive quarters began to manifest themselves at once in an improved tone and spirit in the student body, and a very perceptible advance in the quality and amount of their work.

In 1902 the Trustees, upon the suggestion of President Butler, consummated the liberation of the School of Architecture from a connection with the Schools of Applied Science which had for some years been little more than nominal. Together with the Department of Music it was

set apart from all connection with other faculties to be 1902
administered by its own staff under the President, as an independent school, until such time as it should be possible to organize definitely a Faculty and School of Fine Arts, with the Departments of Music and Architecture as a nucleus. This was a step of far-reaching importance. It crowned the long-continued efforts of Professor Ware and of the writer to place the School of Architecture upon the footing of a school of art, not science, and left it free to carve out for itself its own educational destiny. The final consummation of this long process will come with the creation of the promised Faculty and School of Fine Arts, in which this school may take its rightful place. Under these new conditions the registration of the school has again moved upward, attaining, during the year just elapsed, nearly or quite the highest number in its history.

During twenty-two of the twenty-three years of that history, the school was under the direction of its founder, while the presidential chair of the University had been occupied by three different men. Each of these had in turn manifested a deep and intelligent interest in the Department of Architecture. Founded under the late Dr. F. A. P. Barnard, the department had, under President Low, become part of a great university. President Low assumed office in 1889, and began at once his remarkable reorganization and consolidation of the faculties which he found loosely grouped under the general name of Columbia College. In 1896 the consolidated institution assumed the name of Columbia University; the old School of Mines became the Faculty of Applied Science, and the Department of Architecture took its proper place and title as the School of Architecture under that Faculty. Thus was the school at last mercifully delivered from the misleading and absurd title of Department of Architecture of the School of Mines.

In 1901 President Low resigned from the presidency of

1902 the University to reënter political life, and Professor Nicholas Murray Butler was elected President of the University. It was very early in his incumbency of this office that he began to work for the separation of the school from the Faculty of Applied Science. The first suggestion looking toward such a step appears to have been a letter published in the *Quarterly* for September, 1901, from the pen of Professor Hamlin; but the precise nature of the first step to be taken was first outlined in verbal and written suggestions made by Professor E. A. MacDowell of the Department of Music, urging immediate action, supplemented by a communication from Professor Ware, embodying at length his views as to the organization of the proposed Fine Arts Faculty. The Trustees took action in May, 1902, upon a letter received from the President recommending the setting off of the Departments of Architecture and Music, and the separation took effect July 1 of that year.

In June, 1903, Professor Ware laid down the burden of responsibility so long and ably borne, and was made Professor Emeritus by the Trustees, who in making the appointment adopted the following minute: —

> On the occasion of the retirement of William R. Ware as Professor Emeritus of Architecture, the Trustees desire to place on record this expression of their appreciation of his personal worth as well as of his high professional skill and long and successful academic service. It has been given to Professor Ware to organize two successful schools of architecture, and that at Columbia University, which his hand has guided from its earliest beginnings, will remain as an enduring monument of his foresight and zealous skill. The Trustees wish for Professor Ware many years of health and happiness in the enjoyment of the dignity which he has so fully earned.

Professor Ware has carried with him into his charming home at Milton, Massachusetts, the warm affection of nearly two hundred graduates and as many non-graduate former

students in architecture to whom he was always more like 1903
a father, or a friend and counselor, than a pedagogue. His personal influence upon his pupils was always one of the strongest of educative forces, and nothing else can quite take its place. Upon his retirement the administration of the school temporarily devolved upon the writer, as acting head. The future will show what is to be its development and destiny.

The record of the school in the profession is an honorable one. Of the first graduated class of five, three are professors in schools of architecture, F. D. Sherman at Columbia, I. Nolan at Philadelphia, A. C. Nye[1] at Pratt Institute. The other two, Messrs. Little and O'Connor, constitute a firm whose professional achievements and reputation stand very high. Graduates of the school are or have been teachers of architecture at Chicago, Champaign (Illinois), Philadelphia, and the University of Missouri. A number of firms of the very highest standing are composed of alumni of this school, while not a few graduates are doing important work in offices on whose letter-heads their names do not appear. There is always a large colony of recent Columbia graduates in the École at Paris, and they stand uniformly high. Most of them return to the United States less carried away than are many of their fellow-students in Paris by the traditions of the Paris school, of which they reap the full benefit without sacrificing their American predilections or trying to forget their American training.

A word should be said about the special students. In 1890 for the first time the doors were opened to students not candidates for a degree, and they were admitted with-

[1] Since the above was written, news has been received of the sudden death of Professor Nye — the first break in the ranks of the first class to graduate in architecture at Columbia, and a most regrettable loss to Pratt Institute and to the profession.

1890 out examination upon giving evidence of maturity and a fair amount of professional experience. Over a hundred such students have spent longer or shorter terms in the school, and not a few among them have eventually completed all the requirements for the bachelor's degree and graduated as regular students. Among the remainder there are many who have received from their studies at Columbia a new inspiration as well as a new equipment for their professional careers ; who are proud of their connection with the Columbia School, and grateful for what it has given them. Such men are often among the most loyal advocates and supporters of the school, increasing its reputation and giving it the credit of their success. The profession gains by the labors of such men, as truly as by that of those who, with greater opportunities in their early training, have taken the full course and won the bachelor's degree. It has been abundantly proved that such men can be encouraged to enter the school without in any way lowering its standards. The Columbia degree in architecture represents to-day a broader and fuller and higher professional training than it did when special students were first admitted in 1890.

Alfred Dwight Foster Hamlin.

BOOK FOUR

THE AFFILIATED COLLEGES

I. — BARNARD COLLEGE

Barnard College, which cares for the undergraduate women students of Columbia University, is appropriately named in honor of President Frederick A. P. Barnard, under whose administration Columbia College was metamorphosed into a modern university. In 1879, when he had reached the age of seventy, and had long passed the period of life when the average mind gives free admittance to new ideas, President Barnard, in his annual report to the Trustees of Columbia College, submitted some reasons why the institution should permit young women to profit from the educational facilities it afforded. This was one year after the founding of what is now Radcliffe College, four years after the opening of Wellesley and the founding of Smith, six years after the opening of Girton, fourteen after the effective organization of Vassar, and practically contemporaneous with the purchase of the land upon which Bryn Mawr is built.

In his advocacy of collegiate coeducation — for this was what President Barnard, with his sense for logic and economy, and above all his grasp upon American tendencies and ideals, really wished to establish — the great educator was in advance of the community in which he lived, and, in consequence, of the Trustees to whom he made his recommendations. No serious attention was

1883 given to his proposals, but he continued to make them, spurred on by his conviction of the justice of the main cause he had at heart, and doubtless exhilarated by the joy of the only rational form of aggressive combat — that for ideals against prejudices. In the short space of four years he succeeded in arousing public interest in his project to such an extent that a well-signed petition was presented to the Trustees of the College, asking the admission of women students on equal terms with the men at that time enjoying the privileges of the chief metropolitan institution of learning.

To this petition the Trustees replied in three resolutions. The first and second stated what the Board thought it should not and could not do in the premises. The third stated what the Board thought it could do, and this resolution, being positive, not negative in character, and belonging to the history of achievement rather than to that of opinion, is of sufficient importance to warrant quotation in full : —

"*Resolved*, That this Board deem it expedient to institute measures for raising the standard of female education by proposing courses of study to be pursued outside the College, but under the observation of its authorities, and offering suitable academic honors and distinctions to any who, on examination, shall be found to have pursued such courses of study with success."

Neither the substance nor the language of this resolution can have satisfied President Barnard or the petitioners. The Trustees had given their venerable President less than the proverbial half-loaf, and it was apparently due to no special scrutiny of theirs that the ostensible bread offered in such exiguous quantity did not turn out to be a fragment of stone. As a later Dean of Barnard, Mrs. George Haven Putnam, admirably puts it : The President's "ardent wish was to give young women an education ; 'suitable academic honors' were not his chief

desideratum. But the Trustees said in effect: We are 1884
not prepared to educate girls; if, however, they can contrive to educate themselves, we will certify the fact."[1]

But almost before the Trustees were aware of it, somebody had builded better than they knew. The President's report for 1884, the year following the petition, stated that six women had taken advantage of the privileges offered by the resolution just quoted. This meant the inauguration of a "Collegiate Course for Women," which under existing arrangements was bound to prove nondescript and unsatisfactory, but which served very well the purposes of a wedge. Both the women who took the course and the teachers who conducted it were interested in having it superseded by something more orderly and dignified; the former because of the difficulties, the deficiencies, and the lack of adequate external incentives attending their studies; the latter because of the disproportion between the responsibilities devolved upon them and their facilities for proper academic supervision. After a few degrees had been taken, the advocates of the movement for the higher education of women in New York City and its environs perceived that they must have an institution of their own in which the necessary teaching could be done; but they were too wise to let slip the advantages of the hold which the "Collegiate Course for Women" gave them upon the rapidly expanding Columbia. They already held the heart of the citadel, while its gallant, if somewhat obtuse, defenders scarcely realized that more than a few slight sallies had been made against it. A college for men with a long and honorable past — nay more, a swiftly developing metropolitan university — had pledged itself to give its degrees to properly qualified women, had already kept its promise in half a dozen cases,

[1] See Mrs. Putnam's article, "The Rise of Barnard College," in the *Columbia University Quarterly* for June, 1900, to which this chapter is greatly indebted.

1889 and was in duty bound to safeguard those degrees in the most effective and least harassing fashion. If this, on account of local sentiment, could not mean undergraduate coeducation, it did mean, in the light of the experience of the Harvard Annex, the teaching of women applicants for degrees by the same masculine instructors for the most part that taught the young men in Columbia College. The need for economy and academic ideals of training, to say nothing of the sense for fair play, made full coöperation between the two teaching institutions inevitable, while the fact that the older institution conferred all the degrees given differentiated the younger from the colleges for women that had previously grown up under the protection or rather in the shadow of long established educational foundations for men. In other words, if Columbia either could not or would not range herself with the great western coeducational Universities, she was estopped by the niggardly but honorably kept resolution of her Trustees from ranging herself with Cambridge and Harvard as a promoter of the annex idea, whether in name or in substance.

In 1889, the year of President Barnard's death and just a decade after his memorable report, the following persons, who had previously secured the sanction of the Columbia Trustees for their plans, obtained a provisional charter as Trustees of Barnard College ; Mrs. Francis B. Arnold, Rev. Dr. Arthur Brooks, Miss Helen Dawes Brown, Silas B. Brownell, Mrs. William C. Brownell, Mrs. Joseph H. Choate, Frederic R. Coudert, Noah Davis, George Hoadley, Hamilton Wright Mabie, Mrs. Alfred Meyer, George A. Plimpton, Mrs. John D. Rockefeller, Jacob H. Schiff, Francis Lynde Stetson, Mrs. James S. T. Stranahan, Mrs. James Talcott, Rev. Dr. Henry Van Dyke, Miss Ella Weed, Everett P. Wheeler, Miss Alice Williams, and Mrs. William Wood.

Of these twenty-two original Trustees nine are still

THE BUILDINGS OF BARNARD COLLEGE

serving the College in the same capacity. Of those whose 1894
connection with the Board has been severed either through resignation or by death, two should be specially recalled. One, the Rev. Arthur Brooks, rector of the Church of the Incarnation and brother of the late Bishop of Massachusetts, was the first chairman of the Trustees and until his death the main link between the College and the public. The other, Miss Ella Weed, was chairman of the academic committee of the Board and practically served the College as executive head or Dean until her death in 1894. She succeeded through her wisdom and tact in so conducting the administration of the College that its relations with Columbia were strengthened, while at the same time she helped the institution to maintain high standards without forfeiting the sympathy of the community through apparent exclusiveness. A scholarship and the Ella Weed Reading Room commemorate her indispensable pioneer labors. It may not be invidious to mention in connection with these deceased benefactors two of the present Trustees whose services to Barnard date from its foundation and have been specially valuable. One is Mr. George A. Plimpton, the Treasurer of the Board. The other is Mrs. Alfred Meyer, one of the students under the early "Collegiate Course for Women," whose experience of its deficiencies made her exceptionally eager to secure for the women of New York the advantages of the fullest university training.

For it was this and not merely collegiate training that the connection of Barnard with Columbia really involved. After the election of Mr. Seth Low to the Presidency of Columbia, the evolution of the conservative old college into a great university went forward in a startling manner. This meant among other things a large increase in the teaching staff available for both Columbia College and Barnard, and a corresponding gain in the quality of the instruction offered. It meant also encouragement to

1894 ambitious undergraduates to pursue special studies for the higher degrees. It meant access to a larger library, to better equipped laboratories, to more numerous and finer museums and galleries than any strictly collegiate institution, whether for men or for women, could furnish. It meant, finally, all that is included in that indefinite but very significant phrase, "university atmosphere."

These advantages were not, of course, entirely available to the students of Barnard when the College began its work at No. 343 Madison Avenue. The instruction offered to the classes entering during the first three years was identical, so far as it went, with that given at Columbia College, but there were only seven instructors, — a number sufficient, however, to deal with the fourteen regular and the twelve special students who were enrolled the first year. Each year saw more students and the need of more instructors, and the fourth year also brought with it the admission of some seniors into Columbia classrooms. Meanwhile the strictly University Faculties of Philosophy and Political Science had received permission to open their courses to auditors of either sex, and under the former Faculty Barnard students had secured the privilege of being instructed and examined in numerous classes. Relations with the latter Faculty were not established until 1895, shortly before the removal to Morningside Heights was effected. The way to bridge the theoretical chasm was discovered to lie in Barnard's guaranteeing the salaries of two new professors, in return for which the Faculty of Political Science furnished twelve hours of lectures per week to Barnard, a number of professors joining to give them. In mathematics a similar arrangement was made, and in 1898 the somewhat anomalous relations between Barnard and the Faculty of Pure Science were simplified and extended. The entire group of relations between Columbia and Barnard could at no juncture during this period have satisfied a mind with the slightest philosophical

bent; but a fair uniformity of standards was maintained 1895
and the younger institution was slowly preparing itself to become an integral and creditable part of the University system.

At the end of the fourth year eight students were graduated and the College had grown to the number of eighty-five in all classes. Expenses had been met by fees and by small annual donations, so that there were no debts; and $125,000 had been given for permanent uses, $100,000 of which was designed by its donor, Mrs. Van Wyck Brinckerhoff, to serve as a building fund. Such a fund was greatly needed in view of the fact that the removal of the University to a less cramped quarter of the city was becoming imperative. Barnard must move with Columbia, not only for the convenience of the teaching staff of the latter, but also because one of its functions was to register postgraduate women whose courses were taken under the strictly University Faculties. Before the change was made, however, the work of organization was greatly strengthened by the election in 1894 of Miss Emily Jane Smith as Dean. Miss Smith, who later became Mrs. George Haven Putnam, served the College until February, 1900, — in other words until the ratification of the important agreement of the month previous which gave Barnard its present standing in the University.

In her report for the academic year 1894–1895, the new Dean could announce a total enrolment of one hundred and twenty-three students, the founding of several scholarships, the appointment of the new University professors already mentioned, and the selection of Dr. Emily A. Gregory to fill the chair of Botany — the first professorship in the College intrusted to a woman, but not to be long held on account of her regretted death. The next year showed a slight growth in numbers and twice the amount of subscriptions for the purchase of a new site. In 1897 the Dean could report not merely the approaching

1898 completion of two new buildings, Brinckerhoff and Milbank Halls, on the site purchased in the spring of 1896, but also the gift of funds sufficient to complete the group of buildings planned. Milbank Hall had been named in honor of the parents of its donor Mrs. A. A. Anderson; the third building, intended for a dormitory, took its name, Fiske Hall, in honor of the husband of its donor Mrs. Josiah M. Fiske, now Mrs. George W. Collord. This year the total number of students was slightly in excess of two hundred, the growth in the regular arts course, however, not being conspicuous. In 1898, as Miss Smith remarked, the gain was "in the right place," — to wit in the regular undergraduates and qualified postgraduates, not in the special and the music students. In the preceding fall the College had opened in its new buildings, and the corner-stone of the dormitory had been laid. The Dean could also report the admission of women graduates to numerous courses in economics and history, and the establishment of mutually advantageous relations with Teachers College, whereby the students of Barnard could secure a professional teaching diploma at the time of their graduation, and women students of Teachers College could supplement their academic training. The next annual report announced several important gifts in money, the establishment of new scholarships, a good growth in regular and a decrease in irregular students, and a gratifying development of college spirit and social life.

In January, 1900, the more complete incorporation of the work of Barnard College with that of Columbia University took place, and with this year the report of the Dean of Barnard ceased to be a separate publication and was issued along with the reports of the other Deans in President Low's Annual Report. The general effect of the agreements reached between the Trustees of Columbia College and those of Barnard and of Teachers College was well summed up by President Low in the following sentences: —

"New agreements have been made with Barnard College 1900
and with Teachers College, by which both of these corporations, while retaining their separate existence, have become in fact as completely a part of the educational system of the University as though the work that they are doing were being carried on under the University charter. . . . Incidentally these agreements determine the relations of the University to the higher education of women and to the professional training of teachers in a way that cannot be otherwise than satisfactory to those who have these interests at heart. Barnard College becomes a separate college for women, having its own Faculty which controls the instruction leading to the degree of Bachelor of Arts. This degree is conferred by the University upon the women who graduate from Barnard College, in the same way and upon the same conditions as it is conferred by the University upon the men who graduate from Columbia College. The relation of Barnard College to the University Council, and, through it, to the educational policy of the University, is in substance the same as the relation of Columbia College. On the other hand women who have taken the final degree will hereafter become candidates for the degrees of Master of Arts and Doctor of Philosophy as students of the University itself, instead of, as heretofore, as graduate students of Barnard College."

Special features of the agreement were that the President of the University should be *ex-officio* President of Barnard College and a member of its Board of Trustees; that the internal administration of the College should be in the hands of a Dean appointed by the President of the University with the consent of the Trustees of Barnard; that Barnard should be represented in the University Council by its Dean, and, after it should maintain ten or more members of its Faculty, by an elected representative; that officers of instruction nominated and maintained by Barnard should be appointed by the University and should have a standing "the same in all respects as that of the like officers in the University"; that for the services

1900 rendered the University by these officers an equivalent should be rendered to Barnard by other officers of the University of like grade ; that on and after July 1, 1904, all the courses of instruction for women leading to the degree of Bachelor of Arts, with a few exceptions, should be given separately in Barnard College ; that the University would admit women candidates for the higher degrees as graduate students under the Faculties of Philosophy, Political Science, and Pure Science, on the same terms as men, to courses designated by those Faculties with the consent of the persons delivering them ; that the University would confer its degree of Bachelor of Arts upon qualified students of Barnard College, the latter institution granting no degree ; and, finally, that Barnard College should retain its separate corporate existence and that its Trustees should continue to provide for its financial support.

It is needless to say that the gist of this compact, legally terminable but practically only subject to amendment, lay in Barnard's securing University supervision and support, in the University's growth in students and influence, and in the increase and improvement of the teaching force in both institutions. The struggle for the higher education of women in the city of New York and its vicinity begun by President Barnard had resulted in a decisive victory, more creditable to both sides than victories of opinion often are, and very acceptable to the community in the midst of which it was obtained. It was not, however, exactly the sort of victory the philosophical educator had hoped for, nor was it a complete one, since it is still possible for an intelligent and reputable human being, simply because the accident of birth has made her a woman, to be denied advanced and specialized training in legitimate studies taught in Columbia University to mortals differently attired.

Lack of space renders it impossible to follow in detail

the history of Barnard since its close union with Columbia 1904
was effected. It must suffice to say that the wisdom of the agreement between the institutions has been made manifest, and to note a few facts of special interest. After Mrs. Putnam's resignation in February, 1900, Professor James Harvey Robinson, of the Faculty of Political Science, acted as Dean, and carried the College over a critical period with great skill. The Faculty of Barnard College, as reorganized, held its first meeting on March 15, 1900, and comprised, besides the President and the Acting Dean, fourteen professors and adjunct professors, nearly all of whom had previously served on one or more of the Columbia Faculties. The other officers of instruction numbered nineteen. Four years later the Faculty comprised twenty-five professors and adjunct professors, and the other officers of instruction numbered thirty. In 1900 there were one hundred and seventy-one undergraduate students; in 1904 the four classes formed a total of three hundred and thirty students in course.

To fill Mrs. Putnam's place with a woman of scholarly training and ideals and of exceptional executive ability was the first task that confronted the Trustees after the initial steps of reorganization had been taken. Their choice finally fell on Miss Laura Drake Gill, a graduate of Smith College, a student at many European universities, a successful teacher of girls, and an experienced philanthropical worker in Cuba during and after the Spanish-American War. Miss Gill was formally installed as Dean on May 1, 1901, and her conduct of her difficult office has abundantly proved the wisdom of her appointment. The year that gave Barnard a new Dean deprived Columbia of the services of President Low, who, by his interest in everything pertaining to the education of women, had shown himself worthy to be Dr. Barnard's successor. His place was supplied, first temporarily then permanently, by Professor Nicholas Murray Butler. That

1903 Barnard would receive all her rights and more under the latter's administration was a foregone conclusion, if only because of the spirit of fair play, the logical acumen, and the sense of practicality displayed by him in a short paper on "The Education of Women," contributed to the *Columbia University Quarterly* for June, 1900. Since Dr. Butler's inauguration Barnard has received two important benefactions: one of $500,000, consequent upon Mr. John D. Rockefeller's contingent gift of $250,000; the other of $1,000,000, from Mrs. A. A. Anderson, the donor of Milbank Hall. The latter gift took the form of the block of land fronting the College, and thus insured space for future expansion. That this will come is certain, both from the experience of the past few years and from the fact that the public of New York is being more and more made to see that Barnard is worthy, not only of Columbia's adoption, but of the entire city's pride and effective support. That it is worthy of the love of its students and graduates, and of all who have been privileged to contribute to its upbuilding, does not need to be affirmed.

WILLIAM P. TRENT.

THE BUILDINGS OF TEACHERS COLLEGE

II. — TEACHERS COLLEGE

The development of Teachers College from its earliest form as an organization, covering a little less than a quarter-century, shows several clearly marked stages. It was at first a purely philanthropic organization designed to better the conditions of the poor by instructing girls in household economy, and boys in manual occupations. Its next step was the equipment and training of teachers of these subjects, and the dissemination of the growing belief in the educational importance of the training of the hand. From this stage it passed into the phase of training teachers, at first for all the work of the kindergarten and elementary schools, and afterward for high school teaching, principalships, and supervisory positions. Later it added, as a clear necessity, certain courses of a purely academic character, and so grew into an independent College with a four years' course. During this stage of its evolution it came into contact with Columbia University, at first through a loose alliance, and later through an agreement that made it an integral part of the University.

From the beginning it was guided and formed by men and women who saw in wise education the best form of philanthropy. And though it has now ceased to be classed among philanthropic institutions, in the more restricted sense of the term, its fundamental aim is still the same, — public service through the training of teachers.

In 1880 a number of young women formed the Kitchen Garden Association. This, like other similar organizations of the time, was an attempt at the solution of the difficulties of living on small incomes in large cities. Instruction was given in sewing, marketing, cooking, and

1884 other things incident to housekeeping. The success of its efforts and the cordiality with which they were received induced the Association after a few years to reorganize under a new and more inclusive name. In 1884, therefore, there was formed the Industrial Education Association, for the purpose of giving instruction not only in household matters for girls, but in the manual arts for boys.

The headquarters of the new Association were at 21 University Place. Among the officers were General A. S. Webb, President, Miss Grace H. Dodge (who had been a leader in the movement from the beginning), and Messrs. William F. Bridge and William A. Potter. Among the honorary members were President Barnard of Columbia and Mr. Seth Low, then Mayor of Brooklyn. There were in all about sixty working members besides the honorary and corresponding members. The Association had not contracted and centred its activities, but rather extended them along general lines, as is shown by its report in 1886. There were committees on "Mechanical Industries," on "Industrial Art," on "Plans for Outside Organization," on "Vacation Schools," on "Industries for Reformatories," on "Kindergartens," a "Bureau of Teachers," etc. This list indicates, not chaos, but only the indefiniteness inevitable in a new field, and the wide interests of public-spirited men and women. And much of the work was definite enough. Evening industrial schools for boys, classes in cooking and sewing for girls, a school for the training of domestic servants at 54 East 11th Street, and the establishment of the first vacation schools in the city, were some of the achievements of the Association.

Coincident with this period of its activities there was a growing interest throughout the country in manual training. Into this cause the founders of the Association put much thought and labor. In the spring of 1886 they

held a public exhibition of children's hand work, to which 1886
at first the schools of New York and later the schools of other cities were asked to send specimens. The widespread attention which this exhibition received undoubtedly had great effect in advancing the general interest in this phase of education. From this time on the Association, and later the College, gave for a number of years so much prominence to the manual arts that only within recent years have some of its friends come to realize that it is not a technical institution.

Within two or three years the demands made upon the Association, the success of its work, and the wisdom of its managers had brought them to see that they must commit themselves definitely to one line of work — that of training teachers, not merely of hand work, but of the elementary subjects in general. What had preceded this point was the process of germination; the final purpose was soon to appear. From the first, the importance of the teacher had been felt. The report of the Association for 1881 declares that "the Association cannot be responsible for classes or schools taught by untrained teachers." Prior to this, in 1858, President Barnard had proposed to the Trustees of Columbia University a scheme which included the science and art of education. And again in 1881 and 1882 he had represented to the Trustees the importance of these things as university subjects. In 1886 he and his advisers had looked about for some means of realizing his desire of "a teachers' college on a university basis." Leading educators, such as President Gilman, President Walker, Professor Butler, and others, had counselled the officers of the Association in this direction, and in 1887 the Association chose as its President Professor Nicholas Murray Butler, not merely on account of his proved abilities, but for his special interest in the training of teachers. When, therefore, the Association was incorporated in 1889, as the New York College for the Training of Teachers, later

1889 simplified to Teachers College, the organization that had already accomplished so much by its somewhat scattered yet earnest efforts, may be said to have found its definite purpose. Since that time all changes that have occurred have been made with reference to greater efficiency in the one object of training teachers. Higher requirements, both for entrance and graduation, more courses of study, more research work, and a due recognition of the claims of the subjects which entered later than the manual arts, have all been made in recognition of existing educational conditions.

The College was now established at 9 University Place, the old building of the Union Theological Seminary. It was supported in part by tuition fees, but largely by the gifts of generous friends. Among these were prominent Miss Grace H. Dodge, Mrs. Peter M. Bryson, Mr. George W. Vanderbilt, and Mr. Spencer Trask. But much of the general interest in the work was shown in the large number of small contributions. Under President Butler's guidance the College now addressed itself definitely to the work of preparing teachers. Courses were offered in the history and theory of education, supplementary courses in art, manual training, and science were provided, a model school for the observation and practice of teaching was added, and, in general, the work followed the lines of the best existing normal schools.

It soon became apparent, however, that the College must raise and unify its standards. Some of its students were well prepared for the work, others were immature and ill-informed. At first there had been practically no requirement for admission except experience in teaching or earnest desire to teach. During the administration of President Walter L. Hervey, who succeeded President Butler in 1891 and remained in office until 1897, the need of a higher academic standard became imperative. In 1893 there was introduced a definite course of one year of academic study

for students who needed such instruction. A year later, 1893
a second year of such study was required of those who had the equivalent of a high-school course, as a preliminary to the professional course of two years. Entrance to either the academic or professional courses was by examination, by certificate, or by a diploma from normal school or college. By the time, therefore, that the College came to its new site on 120th Street, in 1894, it had in operation a four years' course of study, two years of which were academic and consisted of science, history, English, and the manual arts, and two years of professional study in the history, theory, and art of education.

The growth of the College and the Horace Mann School had been steady and rapid. The building at 9 University Place was badly overcrowded. Early in 1893 Mr. George W. Vanderbilt purchased the lots for the new site, only a few days before it was announced that Columbia had acquired its present location. Other large gifts followed rapidly: the Macy Manual Arts building, the Milbank Memorial building, the Macy Horace Mann School building, the Frederick F. Thompson building for physical education, and the various plots of ground which comprise the block between 120th and 121st streets, from Amsterdam Avenue to the Boulevard. In addition to these more visible gifts, there have been yearly contributions ranging from $50,000 to $75,000 for the current expenses of the College, the establishment of scholarships, and the enrichment of the library generously founded and endowed by Mrs. Bryson. The College now has, as a result of this liberal giving, a library of about 30,000 volumes especially rich in its educational department, buildings and land worth over a million dollars, well-furnished and equipped lecture rooms, laboratories, and offices, and an endowment fund of a half million. This endowment, increased by the actual and conditional gifts of Mr. Rockefeller and others, will, it is hoped, soon reach a million.

1897 While considering the material conditions of the College, mention must be made of its dormitories. The problem of housing its students had long been a difficult one. Two years ago friends of the College erected four large connecting buildings on Amsterdam Avenue, and equipped them in the most recent methods. They contain rooms and apartments for students, and apartments for families. Here, within easy reach of their work, reside most of the students of Teachers College and many of the students of Barnard College.

The educational world has been in the past ten or fifteen years somewhat puzzled at recurring newspaper announcements that Teachers College had become a part of Columbia University. Part of this obscurity has been due to looseness of statement, and part to the fact of a gradual change from an indefinite alliance to a closer and more fixed union. As early as 1890 there existed an arrangement by which students enrolled in either institution might elect certain designated courses in the other, and receive credit therefor at their own College. The range of choice was at first very narrow, and the nature of the contract between the Colleges fluctuating and uncertain. There were, however, from 1892 to 1898, always some graduate students of Columbia University in some of the regular courses of Teachers College. Plans for a closer union had been discussed during the latter end of President Hervey's administration, but the physical distance between the two institutions inevitably delayed such a union. In 1897, after Columbia had removed to her present site near Teachers College, the time seemed ripe for completing the contemplated arrangement. Accordingly in 1898 a reorganization was effected, whereby President Low became *ex-officio* President of Teachers College, and Professor James E. Russell, lately called to the Chair of the History of Education in Teachers College, became its Dean, having the charge of its educational

and financial administration, under the general direction 1898
of the Trustees of Teachers College and the President of the University. The privileges of students in the matter of electing courses to count for degrees were thus extended, and the number of such elections at once began notably to increase. More students of Teachers College elected courses in Columbia and Barnard, and more students from those institutions were registered in the classes of Teachers College. Teachers College was thus brought into full standing as the school of education of Columbia University, in much the same status as its School of Medicine and its School of Law.

But the work of the officers of the College was, though now clearly defined, still only in its beginnings. The Faculty has since been increased and strengthened, new courses offered and old courses made better, new departments established, and, in general, an improvement of the work to keep it nearer to a university standard. Among the more notable advances of the work have been the researches, in the science, history, and art of education, and the higher standards set for students preparing to do special work in secondary schools.

Perhaps the increase in the work of the College can be indicated in part by a brief summary of the opportunities now presented to its students. A graduate of a secondary school, able to pass the College entrance examination, may enter upon a four years' College course and receive at the end of it the degree of Bachelor of Science, and, according to his elections, a diploma to teach in either art, manual training, kindergarten, elementary schools, or some one or more subjects in high schools. To equip himself fully in any special subjects, he may elect courses in his specialty at Columbia College, or, in the case of women, at Barnard College. A student with two years of College training or with a diploma from a good normal school may enter upon the two years of professional

1904 training of Teachers College, and win the same degree and diploma as described above. Students of Columbia and Barnard Colleges may take one of the diplomas of Teachers College along with their Bachelor of Arts degree. For advanced work in education students may win a master's or a doctor's diploma, bearing the same relation to the first or lower diploma of the College as do the master's and doctor's degrees to the bachelor's. Graduates of these or other colleges in good standing may enter upon their graduate work at Columbia University, choosing education as either a major or a minor subject, and having it recognized for the degrees of A.M. and Ph.D. on precisely the same plane as work in any other subject. Thus, briefly stated, we have a full realization of the plan of President Barnard, already referred to in these pages, of a teachers' college on a university basis.

That the educational world is ready for such a scheme has been shown in many ways. Other universities are adopting some of its features. The demand for students trained at Teachers College, particularly for the higher grades of work, exceeds the supply. The number of graduate students in the department of education is greater than in any other department of the University. The number of students in Teachers College, including its academic courses, has steadily increased. The announcement of the current year records a total of 855 resident students, distributed as follows: Graduate students, 106; students in the undergraduate professional course, 413; students in the undergraduate academic course, 88; students not candidates for a degree or diploma, 59; students from Columbia and Barnard Colleges, 189.

In addition to its resident work the College has maintained, since its beginning, a certain amount of extension work. These extension courses, now limited principally to courses for teachers, have covered most of the common

departments of college study, as well as education. By 1904
1903 the work had assumed such proportions as to lead to the organization of it as a separate department of the University, and the appointment of a Director, Professor Frederic H. Sykes, to take charge of the work. This department now offers courses of instruction and courses of lectures, either at the College or in local centres, such as the Brooklyn Institute, on enough subjects to make it possible for a student to cover the ground required for a degree by attending extension classes only. During the coming year the College will be opened several nights each week; and the time may not be far off when a student of ability and energy may complete a course leading to a degree by attending evening classes.

In vital connection with the work of the College almost from the beginning has been the Horace Mann School. It was opened in 1888 with 64 pupils as a school of observation and practice. In 1898 it had 395 pupils, and, in 1904, 873 pupils. Its earlier character, like that of the College, was mainly manual and technical. Like the College it has departed from the somewhat narrow character of a propagandist organization to the broader one of giving a general education in which manual training is a part. The steady pressure from its patronage has made the high school department largely preparatory for college; and its students are now found in most of the prominent eastern colleges.

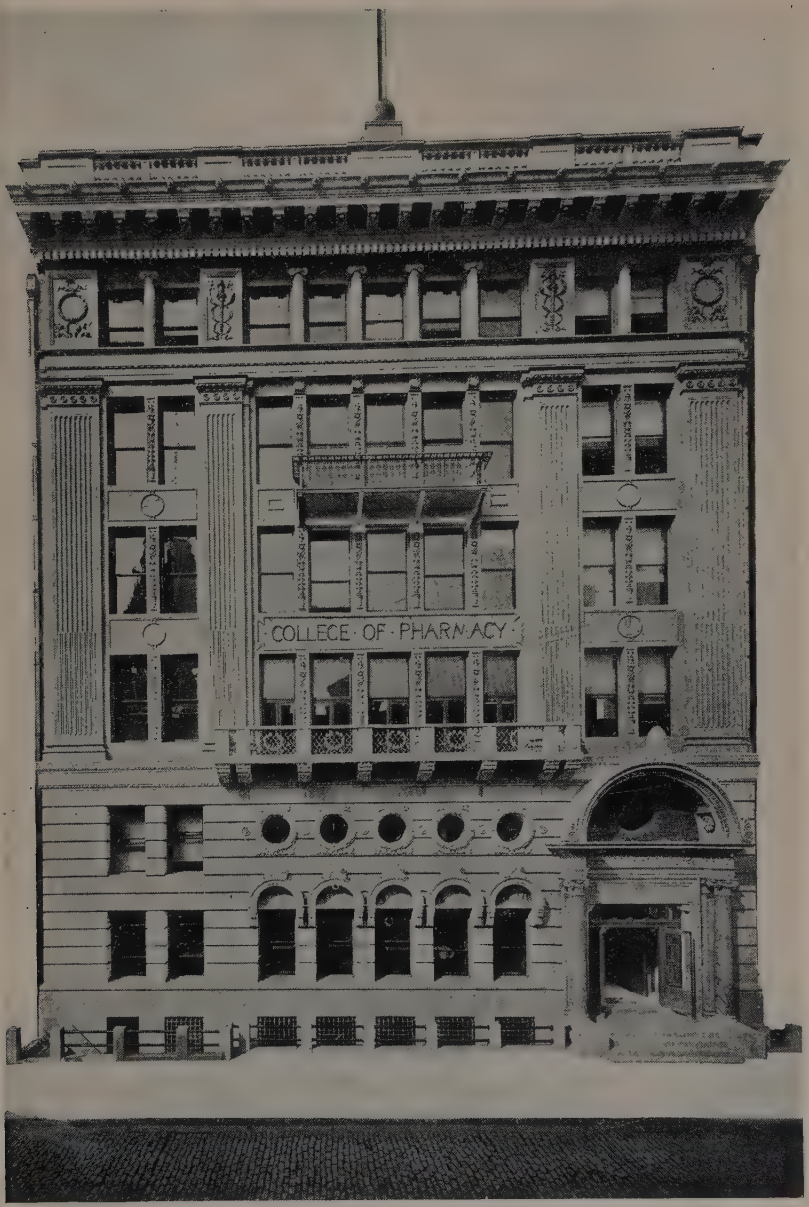
The Speyer School, housed at Lawrence Street, near Amsterdam Avenue, in a building given and equipped by Mr. James Speyer, is an attempt to do for the community in which it stands the work of a good school plus the work of a college settlement. The special relation of this school to the work of the College is as a laboratory, — a school of practice and experiment, where problems in elementary education may be studied and methods illustrated and tested.

FRANKLIN T. BAKER.

III. — THE COLLEGE OF PHARMACY

In the year 1829 a number of the leading apothecaries of the city became convinced that the best interests of their profession required that some special training be provided for those who intended to engage in the practice of pharmacy. At a meeting held on the 18th of March of that year, John L. Embree acting as chairman and Theodore Keese as secretary, the establishment of the College was resolved upon and a constitution was adopted. Seventy-two signatures were affixed to the constitution, and those familiar with the history of that time would recognize in the list the names not only of the leading pharmacists, but of many citizens best known for their interest in the general welfare of the community. The last surviving incorporator was Mr. George N. Lawrence, who died in 1895.

The first officers were John D. Keese, President; Henry H. Schieffelin (whose grandson, Dr. William Jay Schieffelin, occupied the same position in 1903), first Vice-president; John L. Embree, second, and Waldron H. Post, third Vice-president; Theodore Keese, Treasurer; Oliver Hull, Secretary. These, with seven other members, constituted the first Board of Trustees. A charter was granted on the 25th of April, 1831, to continue in force for twenty-five years, empowering the College to hold property to the extent of $20,000. At the expiration of that period a new charter was granted, which has since been amended, and the College is now empowered to hold property to the value of a million dollars. In 1879 the College became a branch of the University of



THE COLLEGE OF PHARMACY

the State of New York, and on July 1, 1904, the College 1831
was affiliated with Columbia University.

It was the belief of the founders of the College that in an occupation involving so many technicalities as that of pharmacy practical experience and school training should go hand in hand, and they provided that one of the conditions of graduation should be four years of experience in a pharmacy, two of which might be those in which the two required courses of lectures were given. These two lecture courses constituted at the outset the whole of the school instruction. They were given in the evening in the small room of the New York Dispensary, at White and Centre streets, the second course being merely a repetition of the first. Dr. John Torrey lectured on chemistry, and Dr. Stephen Brown on materia medica. The annual fee for tuition was $6. By 1861 this fee had been increased to $15, and it has since been increased gradually, until it now stands at $100 per annum. Considering the amount and character of the instruction given, this fee is little more than nominal. The College has been led to keep its fee as low as possible in order to encourage students to take a pharmacy course instead of entering the profession by the back door of apprenticeship only, as the law at present permits.

In 1830 lectures on pharmacy were differentiated from those on materia medica. In 1831 the College graduated its first class of three members. Ten years later a course in practical botany, under the direction of Dr. C. R. McClellan, was instituted. In these eleven years the graduates had numbered thirty-nine. The class of eight graduates recorded in 1837 was not afterward exceeded until 1861, when there were nine, increased to eleven in 1870. In the meantime instruction had been given in the chemical laboratory of Columbia College, in the rooms of the Lyceum of Natural History, in the rooms of the New York University, in the City Hall, a room of

1869 which was sublet by the Mechanics Institute, with a return, in 1836, to the original quarters in the Dispensary. In 1845 the College work was conducted over Lockwood's bookstore at 411 Broadway. In 1849, Professor R. Ogden Doremus having been engaged as lecturer in chemistry, that department was conducted in the professor's room in the New York Medical College at 19 East 13th Street. In 1857 Dr. George Thurber, a close friend of Dr. Torrey, was appointed lecturer in pharmacy and materia medica, and added a course of botanical lectures. The latter lectures were omitted in 1858–1859, but were resumed in 1860. From 1865 to 1867 Professor Chandler lectured on chemistry in his room in the School of Mines of Columbia College, his place being taken in 1868 by Professor Arthur M. Edwards.

The year 1869 was one of the most notable in the history of the College. Professor Chandler resumed the chemistry lectures, and Dr. E. R. Squibb assumed charge of the Department of Pharmacy. Dr. Walter De Forest Day presided over the Department of Botany and Materia Medica, the lectures in botany being delivered in the chapel of the University. Dr. Day also added a short course of lectures in physiology. The attendance of students at once began to increase, and in the following year a class of eleven members was graduated. Three years later, when Peter W. Bedford became Professor of Pharmacy, and Charles Froebel director of the Department of Analytical Chemistry, the graduating class numbered thirty-three, an increase of 200 per cent over the largest preceding class. The size of the graduating class steadily increased from that time until, in 1894, it numbered one hundred and twenty-eight. Partly owing to the increase in the size of the classes, but more as a result of the increased demand for laboratory instruction which then began to be felt, the College determined, in 1878, to have a properly equipped building of its own, and the

disused building of Grace Chapel, 209–211 East 23d Street, was purchased and fitted up, and with it was subsequently connected the adjoining building upon the east. In 1879 Dr. Alphonso Wood was elected Professor of Botany. In 1883 a pharmaceutical laboratory was established under the direction of Professor C. W. Parsons, and this was followed, in 1885, by a laboratory for pharmacognosy, under the direction of Professor Joseph Schrenk. In 1883 attendance at recitations, previously voluntary, was made obligatory. In the same year entrance requirements were established, but some years later the College felt itself obliged, as a result of unprincipled competition, to retrace this advanced step. In 1883, also, the work of the school was graded, the second course of lectures representing advanced work, and the laboratory instruction was greatly improved. In 1885 the requirement of the presentation of a thesis as a condition for graduation was abandoned. About 1889 the attendance of students underwent a large increase, the number of the graduating class advanced from eighty-seven to one hundred and six, and the necessity for a further increase in accommodations forced itself upon the attention of the Trustees, but more especially upon that of the Faculty, and the purchase of land and the erection of a building was determined upon. On various preceding occasions the members of the corporation have manifested their liberality in sustaining the College through critical periods. In 1836 $5500 had been subscribed; the purchase of Grace Chapel had been made possible only through the subscription of $10,000 by the drug trade, and when a much more ambitious undertaking was contemplated, the same generous spirit placed a fund of more than $30,000 at the service of the institution. The present college building at 115–119 West 68th Street was completed in 1894, involving the corporation in a debt of nearly $150,000. The finances have been most carefully

1883

1885 handled, and the debt has been reduced by more than a sixth, but the presence of so serious an obligation has proved an obstruction to educational interests, and it has retarded the College in attaining the best results. In all of its later struggles, however, the College organization has been fortunate in enjoying the coöperation and support of the German Apothecaries' Association of this city and of the Alumni Association of the College. The former society has not only subscribed liberally to all funds for new enterprises and for the cancellation of the debt, but its influence has been most valuable in conserving educational standards.

The Alumni Association was founded on May 24, 1871, chiefly through the efforts of Professor P. W. Bedford. Twenty-four members were enrolled, and Mr. Daniel C. Robbins was elected President. Incorporation was not effected until November, 1888. This action was promptly followed by a large growth in membership and influence. The Association has encouraged the undergraduates, supplied postgraduate students, fostered social relations among the graduates, conducted lecture courses, maintained a journal, supplied teaching apparatus, and subscribed liberally to the building and other funds. Under the leadership of Mr. Charles S. Erb, the Association is now active and prosperous.

In 1885 a very important step was taken in transferring the lectures from the evening to the afternoon hours, a change which was so successful that gradually the course was extended so as to occupy the entire day. No sooner had the facilities afforded by the new building begun to be appreciated in 1894 than the importance of establishing a postgraduate course of instruction was realized, and such a course was instituted in the fall of 1895. Its classes have never been large, although twenty-one students were enrolled in 1903–1904, fifteen of whom received their degree. In the same year the Department

of Microscopy was reorganized, under the direction of 1904
Professor S. E. Jelliffe, and the Department of Microscopical Pharmacognosy has since been by him highly developed.

Since 1895 the instruction has been highly specialized. Chemistry is taught in three separate departments: general chemistry under Professors Virgil Coblentz and John Oehler, organic chemistry under Professors Charles F. Chandler and John Oehler, and analytical chemistry under Professor George A. Ferguson. Besides this a course of lectures in physiological chemistry is given to the postgraduates by Professor George C. Dickman, the professor of pharmacy. Lectures and laboratory work in botany and lectures in physiology are given to the first-year men, and lectures in materia medica and toxicology, with laboratory work in commercial pharmacognosy, to the second-year men, by the writer. The term extends from the first Monday in October to the end of April. At the conclusion of the two years' work, which includes suitable practical and theoretical examinations, the candidate, having had four years' experience in the practice of pharmacy and being twenty-one years of age, receives the degree of Graduate in Pharmacy. The postgraduate course of one term's work leads to the degree of Doctor of Pharmacy. The instruction and requirements of this course are of a high order, including organic and inorganic chemistry, physiological chemistry, systematic botany, technical microscopy, and bacteriology.

The equipment of the College is well adapted for its needs. No educational institution in the city has a larger or finer lecture hall. The pharmaceutical and chemical laboratories accommodate one hundred and fifty students, and the microscopical laboratory, seventy-five students. There is also a dispensing laboratory where the students are trained in the actual reading and filling of prescriptions, as well as a museum of drugs and a reference her-

1904 barium of three hundred thousand specimens, besides two smaller herbaria for teaching purposes. The College possesses one of the largest pharmaceutical libraries in the country, and is abundantly supplied with apparatus, charts, and models. The instruction is of a practical character, most of the text-books being in the nature of laboratory guides, written especially by the professors to accompany their own courses of instruction.

From the very beginning the instruction of undergraduates has been regarded as only one of the functions of the institution. The association of those engaged in the practice of pharmacy for the promotion of professional interests was provided for by the constitution of the corporation. Membership was open to any one then engaged as a druggist or apothecary in New York County, but none thereafter taking up the business was eligible unless properly educated. The initiation fee was fixed at $5, and an equal amount was to be paid annually. Non-resident druggists and apothecaries, and those who had retired from business, might become honorary members, and there might be elected each year to honorary membership one distinguished man of science not resident in the county. The trustees were empowered to publish important literature for the enlightenment of pharmacists. These functions of the College have been performed uninterruptedly, and very much of the important work that has been accomplished in pharmacy, some of it national in character, has thus originated. The first laws for regulating the quality of drug importations, and prevention of frauds, originated in a resolution adopted by the Trustees of the College, which was also largely instrumental in bringing about the organization of the American Pharmaceutical Association. It has participated regularly in the revision of the Pharmacopœia, and its methods of inspection and certification of weights and measures resulted in a great increase in the care practised in the preparation of and commerce in

these important standards. A crusade against dishonest 1904
drugs and medicines has been carried on in this city during the past year by its representatives on the Board of Pharmacy, and successful efforts have been made in aid of the passage of a state law requiring all candidates for licenses to practise pharmacy to be graduates of some acceptable school of pharmacy.

HENRY H. RUSBY.

BOOK FIVE

THE LIBRARY

THERE is no greater mistake than that which is sometimes made, perhaps often made, by those who are ill-informed as to the history of this country, when they think of the people of the early colonies as ignorant or illiterate, or as knowing little or nothing of the refinements of life on either its social or material side. As a matter of fact, a large proportion of the men in each colony were scholarly and refined in their tastes as the result of a scholarly and refined ancestry. The gentlemen who were the first officers of King's College were of this class, and it is entirely natural therefore that they should have recognized the place and value of the printed page as an accessory to all sound education.

All things were in the beginning, however, with the new College; and it is not surprising that the record of library matters seems scanty even to the point of insignificance. Yet to one who knows the history of the College in all its departments, it is entirely evident that the department of books has kept quite even pace with its associates.

In the Laws and Orders of the College, first issued June 3, 1755, there is no reference to the Library; and in the Body of Laws, issued March 2, 1763, there is a doubtful reference only — "The President shall have power to appoint what Books the Students are to read." It is more probable that this refers to text-books than to a library collection.

1756 Yet from the earliest list of benefactors of King's College, prepared in 1756, it appears that "Joseph Murray, Esq., bequeathed his estate and library, about £8000." "The Rev. Dr. Bristow, of London, bequeathed his library, about 1500 volumes." "Mr. Noel, book-seller, gave Roman's Ed. of M. Calasio's Hebr. concordance, 4 vols. fol." "Sundry gentlemen at Oxford gave books, whose names are in them." This record is not quite accurate, because Dr. Bristow really gave his library to the Society for the Propagation of the Gospel, suggesting that the Society give it to the College of New York or to other institutions named, and the Society gave it to the College.

Whether Dr. Bristow's entire bequest ever reached the College is doubtful. In the "Rough Minutes of the Governors of King's College," at the regular annual meeting, held in the City of New York on the second Tuesday in May, 1761, "Dr. Johnson Communicated to the board a Letter which he received from the Rev'd Dr. Bearcroft in which he Desires some Directions about the Library of Books given to this Corporation by the Rev'd Dr. Bristow, whereupon it is Ordered that Dr. Johnson write to Dr. Bearcroft Requesting him to Deliver the said Library to Mr. William Neat of London when he shall Chuse to call for them — and Mr. Marston is requested to write to the said Mr. Neat, Desiring him that as soon as there is a peace he will Call on Dr. Bearcroft for the said Library and Send it over in the best and most reasonable manner he can and to Insure when shipt." Later, at the annual meeting of the Governors of the College, May 10, 1763 : "Mr. Marston communicated a Letter from Mr. William Neat & Company of London Acquainting him that they had shipt nine Boxes of Books the Gift of the late Rev'd Dr. Bristow to the College which the Governors have received — ordered that Mr. Marston be desired to thank them for their generosity and Care and pay the freight

and Other expences Attending the same which the treas- 1763
urer is desired to Repay Mr. Marston."

Nothing satisfactory seems to have come of this shipment, for at a meeting of the Governors of the College on Tuesday, the twenty-third day of October, 1764: "Resolved that Mr. Marston be requested to write to Mr. Neat to Inquire what is become of the Remainder of the Library left to the College by Dr. Bristow and to desire him to Ship them as soon as possible upon the best and most reasonable terms he can:" and still later, at a meeting of the Governors, December 17, 1765: "Ordered that the Rev'd Auchmuty and Mr. Cooper be Desired to write to Doctor Bristow, the Society's secretary, to inquire what has become of the Remainder of doctor Bristow's library given to the Corporation and that he be requested to put them into the Hands of Mr. Neate in order to be sent over as soon as Conveniently may be."

The first payment for books of which we have any record is that on the fifth day of January, 1762, "Ordered that the Treasurer of this Corporation pay to Mr. Garnat Noel the sum of £5 4*s*. in full of his account for Books supplied the College."

The first reference to a Librarian seems to be contained in the record of the meeting of the Governors held on the first day of March, 1763, when "It is resolved that a Librarian be appointed for the College and that he be allowed a salary of £10 per annum and that Mr. Harpur, the mathematical teacher in the College, be and he is hereby selected and appointed to that office till further order.

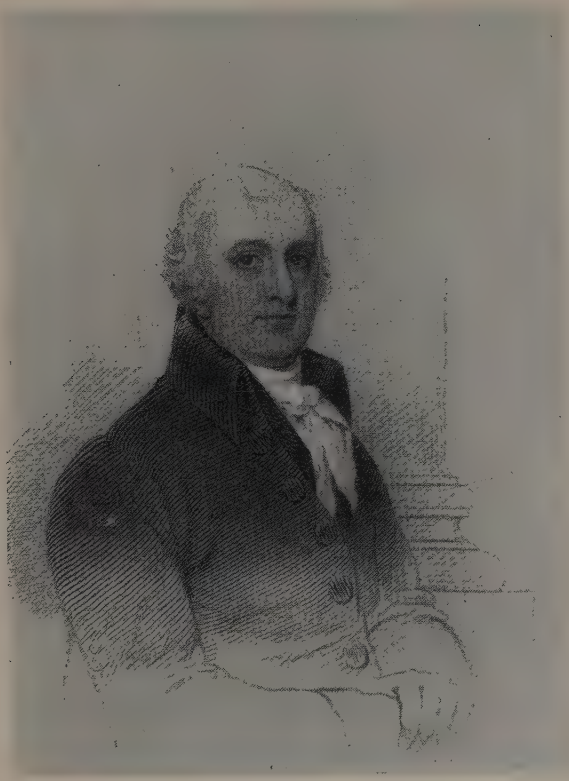
"Ordered that the said Mr. Harpur make a catalogue of the Books that now are and hereafter may belong to the Library and deliver a Copy thereof to the President of the College and another to the Clerk of this Corporation and also that he be accountable for the said Books."

The troublous times of the Revolution brought great

1776 distress to the young College. In 1776, upon receipt of a demand that the College be prepared for the reception of troops, the Library was deposited in the City Hall. Of the loss thus occasioned President Moore says: "A large proportion of the books belonging to the College was wholly lost in consequence of this removal; and of the books recovered, six or seven hundred volumes were recovered only after thirty years, when they were found, with as many belonging to the New York Society Library and some belonging to Trinity Church, in a room in St. Paul's Chapel; where it seems no one but the sexton had been aware of their existence, and neither he nor any body else could tell how they arrived there. Previous to this disposal of the College Library, it contained, besides books purchased by the Governors and those bequeathed by Dr. Bristow and Mr. Murray, many valuable works given by the Earle of Bute and other individuals, and from the University of Oxford a copy of every work printed at the University Press."

Although the advertisements in the current press prove that the Governors of the College met during the Revolution, the records of these meetings are not to be found. The College loyally changed its name from "King's" to "Columbia," and its Governors became Regents. At a meeting of a Committee of the Regents on August 25, 1784, information was received that "The students of Columbia College with a number of others of the city had formed a Society for the purpose of improving themselves in polite literature and requested a chamber in the College to be assigned for their use." It was resolved that "the Committee approve of the Society and that they be permitted to deposit their books in the College Library, and that the librarian of the Society be Librarian of the College until the Regents shall make further order therein."

At a meeting of the Regents in the Senate Chamber in New York, in December of the same year, it was resolved



RICHARD VARICK

Chairman of the Trustees, 1810–1816

that the "Following appointments be made. A President, 1785
a Secretary, a Librarian." At the same meeting it was resolved "That the Librarian be responsible for the Library and give security for the books under his care, to be subject to the direction of the Regents and to attend at such time in the Library room as may be thought proper."

In 1785 the Corporation was informed that "Major Edward Clark, by will which he executed some time before the late war, bequeathed to the Governors of the College lately called King's and now Columbia College £1000 sterling to be laid out for Books in addition to the then College Library: that he charged his Hyde Estate a very valuable plantation in the Island of Jamaica with the payment of such legacy which he ordered to be paid within two years after his death. That he appointed several gentlemen some residing in England and some in the said Island of Jamaica together with Goldbrow Banyar, Esq., and said Mr. Duane to be executors of his said Will a Duplicate whereof is in their possession. That Major Clark has since died leaving, it is supposed but not with certainty, the said will in full force. Whereupon Resolved, that the Treasurer take such measures as the Law directs for the Recovery of the said Legacy and that the seal of this Corporation be affixed to the necessary powers for that purpose."

What came of this, if anything, it is now exceedingly difficult to determine. Certain it is that not much followed, for at a meeting of the Trustees on the 26th of November, 1787, a report was made of the condition of the College in which it was stated that there was then no Librarian and that "the College has scarcely any Library."

On April 11, 1792, an Act of the Legislature was passed "To encourage literature by donations to Columbia College" (and several academies), which granted $1500 "to enlarge the Library." Three months later the

1799 Trustees ordered that "the surplus monies from study-rents and fines be applied by the Faculty of Arts to the purchase of books for the Library."

In September of the same year a Committee, consisting of Dr. Johnson, Dr. Romayne, and Dr. Livingston, was authorized to confer with Mr. Francis Childs about purchasing books for the Library — and £750 were granted for this purpose, with an allowance of 5 per cent commission to Mr. Childs.

At a meeting held "at the house of John Simmons, Innkeeper," on Tuesday the 24th of December, 1793, "Resolved that a Committee be appointed together with the Faculty of Arts to appropriate the last of the money granted by the Regents toward enlarging the Library of the College in purchasing such books as they shall think proper: and that Dr. Bard and Mr. B. Livingston and Mr. E. Livingston be the Committee for that purpose."

At a meeting of the Trustees held May 5, 1794, "A letter of the 15th of January last was received from John Hamilton, Esq., British Consul at Norfolk in Virginia, directed to the President of the New York College informing him that he had received from the Governor of Bermuda a set of books for the said College as a present left by the author, Francis Maseres, Esq., and that he had forwarded the same."

It was not until 1799 that we have a record of rules for the use of the Library. At a meeting of the Trustees in November of that year it was "Resolved that the care of the Library be committed to the Professor of Languages and the Professor of Mathematics and Natural Philosophy who shall superintend the same in such order as they shall agree, and according to the following general rules: —

"1. The use of the Library is limited to the Trustees of the College, the Faculties of Arts and of Medicine and their students.

"2. No person except a Trustee, a member of either

Faculty or a student of Medicine when preparing a thesis for a Doctor's degree can take out more than one volume at a time. 1814

"3. The time allowed for borrowing a volume, the penalty for exceeding it, and for damage or loss, shall be the same as those in the regulations of the City Library.

"4. No book shall be issued to any person not residing in the city.

"5. One of the Professors who have the care of the Library shall attend one hour every Saturday from twelve to one o'clock for delivery and receiving of books, and a correct account thereof and of all delinquencies in the use thereof shall be constantly kept in a book prepared for this purpose."

That the progress of the Library was slow and unsatisfactory is to be gathered from the following records: —

At a meeting of the Trustees on January 20, 1812, a petition was directed to the Legislature in which among other conditions which "seem to require the earliest attention" is mentioned the following: —

"Provision for the Library, the appearance and condition of which are humiliating to the College and reproachful to the public character."

At a meeting of the Trustees, January 11, 1813, a second petition was directed to the Legislature in which it was stated "That the College Library is far from being as respectable as the character and interests of the Seminary require."

At a meeting of the Trustees on Monday, March 7, 1814, a further memorial and petition to the Legislature was read and adopted, in which it is stated that "The Library of the College which fell a sacrifice to the War of Independence has never been replaced but in so slender degree as to make it a subject of ignominious Comparison with the prominence in this Respect of other American Colleges. . . . There is no proper Apartment for the Reception of a decent Library."

1817 In the report on the condition of the College, made February 28, 1817, the attention of the Trustees is called to the fact that "Many valuable books from the College Library are missing, and no record is to be found by which they may be recovered. Books at present are not loaned to the students. To prevent further loss the key of the Library is now in the possession of the President. Should the Trustees deem it expedient to appoint an assistant Professor, the Board respectfully suggests whether it would not be advisable to commit to him the care of the Library that at stated times it should be made his duty to deliver books to the students and that he should receive from them a reasonable compensation for his trouble."

In the report of the Committee of Visitation, presented on May 5, 1817, it is stated "That the Library of the College is in a very neglected state and appears not to be under the special charge of any particular person; and the Committee recommends that the youngest Professor should be appointed Librarian with a suitable compensation; and that a Committee to consist of two or more Trustees be appointed annually, to be denominated the Library Committee, whose duty it shall be to inspect the state of the Library, to make a catalogue of the books, to devise rules for its regulation, to purchase books under the authority of the Trustees, and generally to attend to the preservation and improvement of the Library."

The first appointment of an Assistant Librarian seems to have been made at a meeting of the Trustees on May 3, 1819; a Mr. Meaker, "A young man of good character and a good scholar," but whose father "is poor and has a large family to support," was allowed to pursue his studies free of expense on the condition that he assisted the Librarian in the performance of his duties during the first three years, and the Professor of Natural Philosophy in the care of apparatus during the senior year.

Early in the year 1821 the Trustees adopted a new body 1838
of statutes, under which the Library was to be in general charge of a committee of the Trustees, and the Junior professor was *ex-officio* Librarian under the direction of the Trustees. The only persons privileged to take books from the Library were the Trustees of the College, the President and Professors, the students of the senior and junior classes, and "such of the graduates of the College residing in the city of New York as shall contribute toward the expenses of the Library the sum of four dollars annually;" and the Library was ordered to be opened for the purposes of delivery of books from twelve to two o'clock every Saturday.

In 1825 the first really valuable addition was made,—that of the purchase of Lorenzo Da Ponte's library, which gave Columbia its first collection of Italian poets and miscellaneous literature. It was not until 1838 that another notable advance was taken, when the Trustees secured the library of Professor Moore. This was especially rich in the classics and in philology, and included many excellent and some quite beautiful editions of Italian literature. What was even more important, Professor Moore himself was engaged to put the whole Library in order and to arrange it for more convenient use. Previous to that date (1837) there had never been a regular incumbent of the office devoting himself entirely to its duties and to the interest of the Library. Professor Renwick, Professor Anderson, and Professor Vermilye had united the offices of Librarian with their instructional duties.

Professor Moore made the first catalogue of the Library, in manuscript, which was in use as late as 1865.

Up to 1835 only the two higher classes were permitted to use the Library, but in that year the sophomore class was granted the same privilege. In 1838 still further liberality of administration was shown by a resolution to permit "such members of the freshman class as the Presi-

1839 dent may especially designate" to have the privilege of taking books from the College Library, subject to regulations applicable to other classes. In 1839 the uses of the Library were still further enlarged by permission granted to the teachers of the Columbia Grammar School, and such students as the Rector may recommend, to take out books, "provided that the Rector hold himself personally responsible for the safe return of the same."

But that this was still a day of small things is evident from the report of a Special Committee, made in July, 1843, in which it was stated that the annual expenses for the Library had not exceeded $100.

Professor Moore was followed in 1839 by George C. Schaeffer, who was succeeded in 1847 by Lefroy Ravenhill, A.M., M.D., who had been assistant Librarian for a few years. Dr. Ravenhill died in 1851, and was succeeded by William Alfred Jones, A.M.

Under Dr. Ravenhill served as an assistant Stephen Rowe Weeks, who was also janitor of the College. Mr. Weeks continued to serve both as janitor and as assistant librarian, until Mr. Dewey's incumbency, when he was placed in charge of the Shelf Department, retiring in 1887 because of advancing years and physical infirmities. He was one of the pensioners of the College from 1887 until his death a few years later. In some of the catalogues of his day his name appears as that of assistant librarian only, in some as janitor only, and in some as janitor and assistant librarian, — but he served in both capacities, almost continuously, and is remembered as one of the most faithful of the earlier minor officers.

Mr. Jones was a peculiarly active and efficient officer and did much to bring the Library into notice and prominence, and especially perfected its records. It was he who discovered or at least called attention to the signature of Ben Jonson in the heroic Latin poem "Gustavidos," printed at Leyden in 1531.

It is not easy to determine the number of volumes in the Library at any stated time, but in the catalogue for the academic year 1849–1850 it appears as 15,000. Two years later it is said to be 15,500. The next year it was 16,000. Then for several years it was stated as 20,000. Our copy of the catalogue for 1856–1857 places the number at 20,000; but some one, presumably Professor Joy, as the catalogue came from his collection and the writing seems to be his, corrects this in ink to 15,000. In May, 1862, the number was stated as 14,000, and the statement was made that the increase in five years has been 2379 volumes. 1857

The Minutes of the Trustees' meeting for December 13, 1852, show that the salary of the Librarian was "raised" to $300 a year.

It was not until 1857 that favorable mention is found concerning either the Library or its rooms. In May of that year, speaking of the College and its new location, the *Evening Post* said, "The east wing is occupied by the Chapel and by the extensive Library of the College."

It was in that year also that the first reference to the Library (except to the number of books) appears in the annual catalogue. The paragraph states briefly that the students of the senior, junior, and sophomore classes, and such of the freshman class as may be designated by the President, shall have access to the College Library and be permitted to take books therefrom on the days and at the hours appointed for that purpose so long as they observe the rules duly established. It also states that there were then 16,000 volumes in the College Library.

In the catalogue of the following year the hours of the Library are given as from 1 to 3 P.M. — days not mentioned.

In 1861, June meeting of the Trustees, "A resolution reduced the salaries of officers of the College" as follows: "the Librarian to $900." Mr. Jones was at that time the Librarian, and in the same year he published an article in the *University Quarterly* which stated that "the Library

1863 amounts to upward of 13,000 volumes, after deducting 850 volumes which have been removed to the library of the Law School." At that time the hall in which the books were contained was 65 feet long by 28 feet wide in the clear, in addition to an adjoining room, shelved on three sides and capable of containing about 2000 volumes.

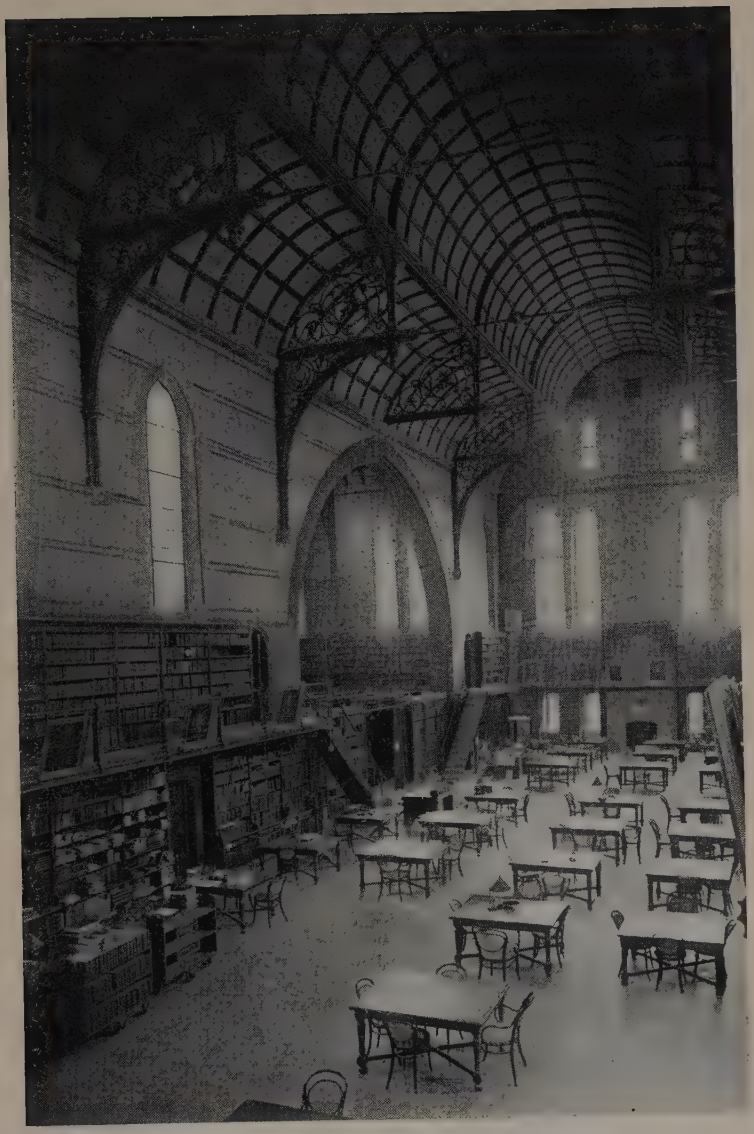
In 1863, in the year preceding Dr. Barnard's assumption of office, the Library was reported as possessing 14,941 volumes, exclusive of pamphlets, but the collection was a choice one, especially in classical literature. Its use was confined to College officers, members of the upper classes, and such freshmen as might be designated by the President. It was open for delivery of books from 1 to 3 P.M. five days in the week during term time, holidays excepted.

Apparently it was not until the spring of 1867 that the Library possessed a reading room. At that time, on application, the Standing Committee of the Trustees was authorized to fit up a room in the College building with tables, chairs, and other conveniences to serve as a reading room "and place of resort" for the professors and other officers of instruction in the College.

In 1868 there is a memorandum that the number of books in the College Library, ascertained by actual count after the Library of the School of Mines was withdrawn, was 13,795.

February 7, 1881, a plan presented by the Building Committee for a Library building was approved, with rooms for instruction on the first floor. The Committee was authorized to direct the construction of the building and provide the necessary furniture and necessary heating and ventilating apparatus, and an appropriation of $284,000 was made for that purpose.

June 5, 1882, an appropriation of $16,320 was made for furniture for the Library and Observatory — afterwards increased to $30,200 — still further increased (in October,



INTERIOR OF THE LIBRARY, 49TH STREET

1884) by $2500 for the Library building and $5000 for 1883
furniture for the Library and Observatory.

In 1881 the Library received a most valuable gift, by a provision made in the will of Stephen Whitney Phœnix (in 1876), by which his entire and choice collection of about 7000 volumes was transferred to the College. This collection has been maintained intact and is still one of the most valuable in the Library.

In 1874 the first printed catalogue was issued, as far as can be determined, — a thousand copies being printed at an expense of something over $1200. Even then it was painfully realized that a printed catalogue is dead matter twenty-four hours after it leaves the press.

In 1883 was completed at a cost of over $400,000 a fireproof building for the Library, for the accommodation of the School of Law, and for an Astronomical Observatory; and on the completion of this Library Hall, the several libraries were consolidated into one collection. In this year also provision was made for a Librarian in Chief, at a salary of $3500, to enter upon his duties upon the first day of July; and to this position Melvil Dewey, M.A., was appointed, and was given the sum of $2000 for the organization of a staff service. Giving full credit to all who had labored in behalf of the Library in former years, it is hardly too much to say that this unification of the libraries of Columbia under one efficient administration, with reasonable resources for the organization of staff service, marks the beginning of the Library of to-day. From that date forward appropriations have steadily increased, gifts have multiplied, and although present resources are by no means commensurate with present needs, the fruits of Mr. Dewey's enthusiasm and quite extraordinary administrative power are clearly recognized, and the stimulus then given to the upbuilding of the Library and to its intelligent use is still felt in every department of the University.

In 1889, at the close of Dr. Barnard's presidency, the general and technical libraries had been united and were all housed in a fine building constructed for that purpose on the College block. The Library contained 99,433 volumes and 20,000 pamphlets; more than 500 different serials, including the leading periodicals, transactions of societies, etc., were regularly received; it was open to all officers, students, and graduates for borrowing and reference daily (including holidays and vacations) except Sundays, Good Friday, the Fourth of July, Thanksgiving Day, and Christmas.

In January of that year Mr. Dewey's resignation was presented and accepted, and he withdrew to inaugurate the great State Library School over which he still presides, at Albany. Mr. George H. Baker, his then assistant, was placed at the head of the Library, and so remained for ten years. The present incumbent took office July 1, 1899.

In 1890 Mr. and Mrs. Samuel P. Avery took the first steps towards the establishment of the Avery Library, which, under their fostering care and large and intelligent generosity, has become one of the most notable collections of its kind in this country; devoted exclusively to architecture, decorative art, and landscape gardening, and buying largely those books which the average architect cannot afford to buy or which are so rare as to be off the general market. This collection is extensively used by the best architects of this country, and its influence in the development of sound art and good taste is widespread and generally and gratefully acknowledged.

In March, 1898, announcement was made of the gift of Joseph F. Loubat (Duc de Loubat) of property valued at $1,100,000, — the property or its proceeds to be applied, after the death of the donor, to the endowment of a fund to be known as the Gaillard-Loubat Library Endowment Fund.

In 1895 President Low, with that remarkable generosity 1904
and large foresight for which he is noted, offered to become responsible for the cost of a new University Library building to an amount not to exceed $1,000,000, to be erected in memory of his father ; and the present structure, one of the most stately and beautiful buildings in this country, stands as a constant reminder of the large-minded and unselfish citizenship of both the father and the son.

At present the collections immediately available to the officers, students, and graduates of Columbia, and (upon introduction) to "persons of mature years desiring to engage in definite research which cannot be successfully conducted in the public or other libraries of the city," are as follows : —

	Books	Pamphlets
Columbia Library	362,000	100,000
Special Collections, classified and catalogued, but not accessioned . .	4000	——
Teachers College	25,000	5000
Barnard College	2000	——
College of Physicians and Surgeons .	600	——
College of Pharmacy	8000	1000
Dissertations, classified and catalogued, but not accessioned . .	30,000	——

During the academic year 1903–1904 all the collections of the various schools and colleges in or coördinated with Columbia University were placed under the general care of the Librarian of the University, with instructions to secure the most complete unification possible of all administration.

James H. Canfield.

SEAL OF KING'S COLLEGE.

SEAL UNDER THE REGENTS.

SEAL OF COLUMBIA COLLEGE.

GENERAL READING ROOM, UNIVERSITY LIBRARY

APPENDIX A

"New York, May 31, 1754.

ADVERTISEMENT

To such Parents as have now (or expect to have) Children prepared to be educated in the College of New York.

I. As the Gentlemen who are appointed by the Assembly, to the Trustees of the intended Seminary or College of New York, have thought fit to appoint me to take the Charge of it, and have concluded to set up a Course of Tuition in the learned Languages, and in the Liberal Arts and Sciences: They have judged it advisible that I should publish this *Advertisement*, to inform such as have Children ready for a College Education, that it is proposed to begin Tuition upon the first Day of *July* next, at the *Vestry Room* in the new *School-House*, adjoining to *Trinity Church* in *New York*, which the Gentlemen of the Vestry are so good as to favour them with the Use of it in the Interim, till a convenient Place may be built.

II. The lowest Qualifications they have judged requisite in order to Admission into the said College, are as follows, *viz.* That they be able to read well, and write a good legible Hand; and that they be well versed in the Five first Rules in *Arithmetic*, *i.e.* as far as *Division* and *Reduction ;* And as to *Latin* and *Greek*, That they have a good Knowledge in the *Grammars*, and be able to make grammatical *Latin*, and both in construing and parsing, to give a good Account of two or three of the first select Orations of *Tully*, and of the first Books of *Virgil's Æneid*, and some of the first Chapter of the *Gospel of St. John*, in *Greek*. In these Books therefore they may expect to be examined; but higher Qualifications must hereafter be expected: and if there be any of the higher Classes in any College, or under private Instruction, that incline to come hither, they may expect Admission to proportionably higher Classes here.

III. And that People may be better satisfied in sending their Children for Education to this College, it is to be understood that as to Religion, there is no Intention to impose on the Scholars, the peculiar Tenets of any particular Sect of

Christians; but to inculcate upon their tender Minds, the great Principles of Christianity and Morality, in which true Christians of each Denomination are generally agreed. And as to the daily Worship in the College Morning and Evening, it is proposed that it should, ordinarily, consist of such a Collection of Lessons, Prayers and Praises of the Liturgy of the Church, as are, for the most Part, taken out of the Holy Scriptures, and such as are agreed on by the Trustees, to be in the best Manner expressive of our common Christianity; and, as to any peculiar Tenets, everyone is left to judge freely for himself, and to be required only to attend constantly at such Places of Worship, on the Lord's Day, as their Parents or Guardians shall think fit to order or permit.

IV. The chief Thing that is aimed at in this College is, to teach and engage the Children to *know God in Jesus Christ*, and to love and serve him, in all *Sobriety*, *Godliness*, and *Righteousness* of Life, with a *perfect Heart, and a willing Mind;* and to train them up in all virtuous Habits, and all such useful Knowledge as may render them creditable to their Families and Friends, Ornaments to their Country and useful to the public Weal in their Generations. To which good Purposes, it is earnestly desired, that their Parents, Guardians and Masters, would train them up from their Cradles, under strict Government, and in all Seriousness, Virtue and Industry, that they may be qualified to make orderly and tractable Members of this Society; — and above all, that in order hereunto, they be very careful themselves, to set them good Examples of true Piety and Virtue in their own Conduct. For as Examples have a very powerful Influence over young Minds, and especially those of their Parents, in vain are they solicitous for a good Education for their Children, if they themselves set before them Examples of Impiety and Profaneness, or of any sort of Vice whatsoever.

V. And, *lastly*, a serious, *virtuous*, and *industrious* Course of Life, being first provided for, it is further the Design of this College, to instruct and perfect the Youth in the Learned Languages, and in the Arts of *reasoning* exactly, of *writing* correctly, and *speaking* eloquently; and in the Arts of *numbering* and *measuring;* of *Surveying* and *Navigation*, of *Geography* and *History*, of *Husbandry*, *Commerce* and *Government*, and in the Knowledge of *all Nature* in the *Heavens* above us, and in the *Air*, *Water* and *Earth* around us, and the various kinds of *Meteors*, *Stones*, *Mines* and *Minerals*, *Plants* and *Animals*, and of every Thing *useful* for the Comfort, the Convenience and Elegance of Life, in the chief *Manufactures* relating to any of these Things: And, finally, to lead them from the Study of Nature to the Knowledge of themselves, and of the God of

Nature, and their Duty to him, themselves, and one another, and every Thing that can contribute to their true Happiness, both here and hereafter.

Thus much, *Gentlemen*, it was thought proper to advertise you of, concerning the Nature and Design of this College: And I pray God, it may be attended with all the Success you can wish, for the best Good of the rising Generations; to which, (while I continue here), I shall willingly contribute my Endeavours to the Utmost of my Power.

Who am, Gentlemen, your Friend And most humble Servant.

SAMUEL JOHNSON.

N. B. The Charge of the Tuition is established by the Trustees to be only 25*s.* for each Quarter."

APPENDIX B

LAWS AND ORDERS OF THE COLLEGE OF NEW YORK

ADOPTED JUNE 3, 1755

I. OF ADMISSION

FIRST. None shall be admitted (unless by a particular Act of the Governors) but such as can read the first three of Tully's Select Orations, and the Three first Books of Virgil's Æneid into English, and the Ten first Chapters of St. John's Gospel in Greek into Latin, and such as are well versed in all the rules of Clark's Introduction so as to make true Grammatical Latin and are expert in Arithmetic as far as the Rule of Reduction to be examined by the President or fellows.

2dly. Every Schollar shall have a Copy of these Laws and his Admittatur shall be signed at the End of them by the President upon his Promissing all due Obedience to them which Promise shall be expressed in Writing under his hand.

II. OF GRADUATION

FIRST. The Examination of Candidates for the Degree of Batchelor of Arts shall be held in the College hall about six Weeks before Commencement by the President or fellows when any of the Governors or any who have been Masters of Arts in this College may be Present and ask any Question they think Proper and such Candidates as have resided four years and are then found Competently versed in the Sciences wherein they have been instructed shall then be admitted to Expect their Degree at Commencement which shall be on the second Wednesday in May.

2dly. Such as have diligently pursued their studies for three years after being admitted to their Batchelor's degree and have been guilty of no Gross immorality shall be admitted to the Degree of Master of Arts.

3dly. No Candidate shall be admitted to either of these Degrees without fulfilling the Terms above appointed unless in Case of Extraordinary Capacity and Diligence, and by a Particular Act of the Governors of the College.

4th. Every one that is admitted to either Degree shall pay a Pistole to the President.

III. Of the Publick Worship

First. The President, or one of the Professors or Fellows in his absence shall Every Morning and Evening read the form of Prayers Established by the Governors of the College and according to the Rules and Method therein Prescribed.

2dly. Every Student shall constantly attend the said Publick Service at such stated hours as the President shall appoint, and those that absent themselves shall for every Offence be fined two pence, and one penny for not Coming in due Season unless they can alledge such reasons for their absence or Tardiness as shall appear sufficient to the President.

3dly. Every Pupil shall constantly attend on the Publick Worship every Lord's Day at such Church or meeting as his Parents or Guardians order him to frequent, and for every neglect shall be obliged to perform such Extraordinary Exercise as the President and Professors or fellows shall appoint, unless he hath some reasonable Excuse admitted to be sufficient by the President.

4thly. Every Pupil shall behave with the utmost decency at Publick Worship or in the Hall, and whoever is proved Guilty of any Profane or indecent behaviour, as talking, Laughing, Justling, Winking etc. he shall submitt to an Admonition for the first offence, and to an Extraordinary Exercise for the second, and if Obstinate expelled.

IV. Of Moral Behaviour

First. If any Pupil shall be Convicted of Drunkenness, Fornication, Lying, Theft, Swearing, Cursing, or any other scandalous immorality, he shall submitt to open Admonition and Confession of his fault or be expelled if his Crime is judged too heinous for any lesser Punishment, and especially if he be Contumacious.

2dly. None of the Pupils shall frequent houses of ill Fame or keep Company with any persons of known scandalous behav-

iour, and such as may endanger either their Principles or Morals; and those that do so shall first be openly rebuked, and if they obstinately persist in it they shall be expelled.

3dly. None of the Pupils shall fight Cocks, play at Cards, Dice, or any unlawfull Game upon penalty of being fined not exceeding Five Shillings for the first Offence, and being openly admonished and confessing their fault for the second, and Expulsion if Contumacious.

4thly. If any Pupil shall be Convicted of fighting, maiming, slandering, or Grievously Abusing any person he shall be fined Three shillings for the first offence, and if he repeats his offence he shall be further punished by fine, Admonition, Suspension or Expulsion according to the aggravation of his fault, especially if Contumacious.

5thly. If any Pupil be convicted of any Dilapidations of the College or any injury done to the Estates, Goods or persons of any others, he shall be obliged to make good all Damages.

V. Of Behaviour towards Authority and Superiours

First. If any Pupil be disobedient to the President Professors or fellows of the College or treat them or any others in Authority with any insulting, disrespectful or Contemptuous Language or deportment he shall be fined not exceeding five shillings for the first Offence or submitt to open Admonition and Confession of his fault, according to the nature of it, and be expelled if he persists Contumacious.

2dly. Every Pupil shall treat all his superiours, and especially the Authority of the College with all duty and respect by all such good manners and behaviour as Common Decency & good breeding require, such as rising, standing, uncovering the head, Preserving a proper distance, and using the most respectfull Language, etc. and he that behaves otherwise shall be punished at the discretion of the President or fellows and Governors according to the Nature and degree of his ill behaviour.

VI. Of College Exercises and Due Attendance

First. The business of the first year shall be to go on and perfect their studies in the Latin and Greek Classics and go over a system of Rhetoric Geography and Chronology, and such as are designed for the Pulpit shall also study the Hebrew.

2dly. The business of the second and third years shall be after a small system of Logic to study the Mathematics, and the Mathematical and Experimental Philosophy in all the severall branches of it, with Agriculture and Merchandize together with something of the Classics and Criticism all the while.

3dly. The fourth year is to be devoted to the studies of Metaphysics Logic and Moral Philosophy with something of Criticism and the Chief Principles of Law and Government, together with History, Sacred and Profane.

4thly. The Pupils in each of their Turns shall be obliged at such times as the President shall appoint to make Exercises in the severall Branches of Learning suitable to their Standing both in Latin and English, such as Declamations and Dissertations on Various Questions pro and con. and frequently Thesis and Syllogistical Reasonings.

5thly. Whoever shall misbehave in time of Exercise by Talking, Laughing or Justling one another &c. shall be fined one Shilling for each Offence.

6thly. All the Pupils shall be obliged to apply themselves with the utmost diligence to their Studies and constantly attend upon all the Exercises appointed by the President or their Tutors or Professors for their Instruction.

7thly. None of the Pupils shall be absent from their Chambers or neglect their Studies without leave obtained of the President or their respective Tutors, except for Morning and Evening Prayers and Recitation, and half an hour for Breakfast and an hour and half after Dinner, and from Evening Prayer till nine of the Clock at night. The penalty four pence or some Exercise for each offence.

8thly. If any Student shall persist in the neglect of his Studies either through Obstinacy or Negligence, and so frequently fails of making due Preparation for Recitation and other appointed Exercises, and if he refuse to submitt and reform after due Admonition he shall be rusticated *i.e.* suspended for a time and if he does not bring sufficient Evidence of his Reformation he shall be expelled.

9thly. No Student shall go out of Town without the President's or his Tutor's leave, unless at the Stated Vacation, upon Penalty of Five Shillings, and for repeating his Fault he shall be rusticated, and if Contumacious, expelled.

N. B. The Stated Vacations are a month after Commencement,

One Week at Michaelmass, and a Fortnight at Christmas and Easter Week, *i.e.* from Good Fryday till the Fryday following, which last being so near Commencement is to be Considered as only a Vacation from Exercises but not from the College or Dayly Morning and Evening Prayers, and so does not come within the last Prohibition.

All the Fines shall be paid to the Treasurer of the College to be laid out in Books and disposed of as a reward to such of the Schollars as shall Excell in the Course of their Studies in their severall Classes as the President Professors and Tutors or the Major part of them shall Direct.

Under this scheme, President Johnson, who was at first sole instructor, confined himself, after the regular organization of the College, to instruction in Greek, Logic, Metaphysics, and Ethics.

The plan of education recommended by the Committee to supersede that just given, and adopted by the Governors March 1, 1763, was as follows, as quoted from the minutes : —

PLAN OF EDUCATION

FIRST YEAR

Salustii Historia — Cæsaris Commentar : Ovidii Metamor : & alia — Virgil Ecl : Esop : Fab : Gr. Lucian Dialog : Test. Gr : — Grot : de Veritate — Latin and Greek Grammars to be consulted or repeated as often as shall be found necessary. Translations with Lat. & Engl : Eng. & Lat. Themes.

N. B. Corn : Nep : & Select : e profan : if necessary.

SECOND YEAR

Ciceron : Officia & alia — Quint : Curt : — Terent : Com : — Ovidii Epistolæ — Virgil Æneis et Georgica — Test : Gr : continued — Epictet : Enc : — Xen : Institutio Cyri & Exped : Farnab : Epig :

N. B. Latin & Gr. Gram : as before.

Wallisii Locia — Sanderson Comp. — Johnson Noetica. Rhetoric — Repetitions to learn the Art of speaking.

Trans : into Lat : & Eng : continued — Lat : Themes. Lat : & Eng : Verses.

THIRD YEAR

Ciceron: Orationes — Cicero de Oratore — Quintil: Instit: Orat: — Plin: Epist: — Catul: Tibul: Propert: — Horatii Opera — Aristot: Eth: & Poetic — Platon: Dial: — Xen: Mem: — Theoc: Idyl — Hom: Il. — Compend: Eth: — Johnson — Whitbey & Hutcheson: — Ethic: Hutch: Met. — Syllogistl Disput: in Latin in the Hall — Lat: Decl: & Them. — Engl. Essays — Lat: & Engl: Verses & Repetitions continued.

FOURTH YEAR

Ciceron: Tusc: Disput — Livii & Taciti Historiæ — Lucan Pharsal. — Juv: & Pers: Sat. — Plaut: Com: — Hom: Odys: — Soph: — Eurip: — Æsch: Tragœd. — Thuc: Histor. — Herodot: Histor. — Longinus de Subl: — Demosth: Orat. — Dionys: Halicarn. — Isocrates — Hebr. Gram. & Bibl: Hebr. — Grot: de B. & P. or Pudendorf — Hutch: Mor. Phil. & aliorum to be continued. Metaph: to be continued. Lat: Th: & Declam. — Philosophical Essays in Eng: & Latin & Lat: & Eng: Verses — Disputations in the Hall and Repetitions continued.

The "Body of Laws" as recommended and adopted at the same time is given in the following minute of a meeting of the Board of Governors, held March 2, 1763:

The Laws, Ordinances and Orders of this Corporation for the Government of the College having been promulged in the College Hall pursuant to an Order of Yesterday in the presence and hearing of this Board, and also in the presence and hearing of the Fellows Professors Tutors and Students of the College the same were ordered to be entered in the minutes and are as follows (to wit) —

I. Of Admission

1st. Each Person to be Admitted shall be able to give a rational Account of the Latin and Greek Grammars — to render Sallust, Cæsar's Commentaries or some part of Cicero's Works into English, the Gospels at least from the Greek into Latin and to translate correctly both English into Latin, and Latin into English. He shall be examined by the President, and if admitted shall subscribe to the Statutes of the College (having first carefully copied them) thereto promising all due Obedience, which Subscription shall be countersigned by the President.

2d. Each Person admitted as above shall have an Habitation in College assigned to him by the President in which he shall be obliged to Lodge (unless by special leave obtained from the Governors or President), except at the stated Vacations under the penalty of five Shillings for the first Night of his Absence — Eight Shillings for the Second — Twelve Shillings for the third (or adequate Exercise) and Expulsion for a Continuance of his Offence, or such other punishment as the Governors shall think necessary.

3d. Each Person also, Admitted as above, shall procure within fourteen Days of his Entrance a proper Academical Habit, in which he shall always appear (unless he have leave of the President or Tutors) under the Penalty of two Shillings for the first Offence (and so on in proportion) or adequate Exercise.

4th. No student shall be admitted *ad eundem* from another College without bringing proper Credentials of his good Behaviour and also satisfying the President and such of the Governors of the College as shall be appointed to regulate the Commencement of his being properly qualified for such admission.

5th. The Parent or Guardian of each Student at his Admission shall give a Bond to the Corporation of the College to pay all the Dues to which the said Student shall thereby become subject; as also to make good all Damages that the said Student shall wilfully have been the Occasion of to his or any other Apartments of the College.

II. Of Attendance

1st. Each Student shall attend Morning and Evening Prayer in the College, and also public Worship on the Lord's Day, Morning and Evening, at such places as his respective Parents or Guardians shall appoint (unless in Case of Leave or Sickness) under the penalty of four-pence for each Omission, or proportionate Exercise, either for Absence or Tardiness; of which an Account shall be taken by some of the Students, and delivered Weekly to the President and at such other Times as He or any of the Tutors shall think proper to demand it.

N.B. The Prayers to be read by the President or Tutors according to the Form prescribed.

2d. The Students shall dine regularly in the public Hall:

and such as are absent without leave shall be subject to the same penalty as those that are absent from Prayers.

3d. The Students shall regularly and punctually attend upon their respective Tutors in the College, and at the Times appointed and shall then and there perform such Exercises as have been ordered: And in Case of negligence or absence they shall be punished as the President and Tutors respectively shall think proper, either by pecuniary Mulct, not exceeding four pence for each Offence or by Additional Exercises proportionated to the Nature and Frequency of it. And the President shall have power to appoint what Books the Students are to read, what Exercises they are regularly to perform, and the Times of their Attendance.

4th. If any of the Students shall be absent from their Chambers after nine o'Clock at Night in Winter, or ten in Summer (or at other Times when the College Business requires their Attendance) they shall subject themselves to any Fine not exceeding one Shilling for each Time of their Delinquency, or Exercise adequate to the Offence.

5th. Times of Absence from Study shall be three Quarters of an Hour for Breakfast — an Hour and half for Dinner, and from Evening Prayer 'til Bedtime. And the Stated Vacations shall be one Month after Commencement — one Fortnight at Michaelmas — one Fortnight at Christmas and two Days at Whitsuntide.

N.B. Easter-week viz: from Good Friday til the Friday following (being so near the Time of Commencement) is to be considered only as a Vacation from public Exercise, but not from Attendance at College as at other Times.

III. Of Behaviour &c.

1st. If any one of the Students wilfully and personally affronts the President or Tutors he shall be fined in any Sum not exceeding ten Shillings for the first offence, or have proportionate Exercise set him: and if he continue in his Fault he shall subject himself to Expulsion. Or in Case of proper Submission, if the Nature of the Offence should require it he shall be obliged to compose and repeat in the public Hall a modest Recantation of his Fault, in Order to deter his Fellow Students from the like Practices.

2d. None of the Students shall molest (by making unseason-

able noises, having Company at unseasonable Hours, or otherwise) either the President Tutors or their Fellow-Students: Nor shall they entertain any Company in or be themselves absent from their Chambers during Studying Hours (except upon special occasions to be judged of by the President or either of the Tutors) under the penalty of one Shilling for the first Offence, two Shillings for the Second, and so in proportion as the nature and continuance of the Fault shall require.

3d. If any of the Students shall play at Cards, Dice, or use any other Kind of Gaming within the Appartments of the College, they shall be fined in any Sum not exceeding five Shillings for the first Offence, Ten Shillings for the second and so in proportion or have adequate Exercise set them: and if they persist they shall subject themselves to Expulsion.

4th. If any of the Students shall be known to converse or have any Connection with persons of bad Fame, or such as are unsuitable Companions for them they shall be privately Admonished for the first Offence, publicly for the Second, and if they persist they shall subject themselves to Expulsion.

5th. All Excesses, Indecencies and Misdemeanors of an Inferior Nature (*i.e.* such as do not deserve Expulsion) shall be punished by the President or Tutors, as they shall see occasion, either by pecuniary Mulct not exceeding one Shilling for the first Offence, and so in proportion, or by adequate Exercise. And in Respect to Deportment and Propriety of Behaviour, the President and Tutors shall from Time to Time prescribe such Rules as they find necessary or think convenient.

6th. The Students shall be examined publicly or privately at such Times and in such Manner as the President shall appoint and a Visitation shall be held Quarterly by the Governors of the College viz: The Monday before Christmas, The Monday before Easter, The Second Monday in July and the Second Monday in October.

7th. The President and Tutors or any of them shall have power of visiting the Chambers of the Students at whatever Hours they please, and also of dismissing whatever Company they think proper; and in Case Admission is refused, the Doors shall be forced open, and the Student or Students fined in any Sum not exceeding ten Shillings for the first Offence, or adequate Exercise; and if the Fault is repeated he or they shall be subject to Expulsion.

8th. The President and Tutors respectively shall have power in all Cases to augment the Exercises to which the Delinquents have subjected themselves, if such Exercises are not finished properly, or not given in by the Time appointed; and also to confine such Delinquents to their respective Chambers (except at Times of public Attendance) under what Restrictions are thought proper, til they shall have compleated their punishments, or made proper satisfaction.

9th. No Student shall absent himself from College (except in Case of sickness) without Leave obtained of the President or one of the Tutors under penalty of such Fine or Exercise as the Nature and Continuance of the Fault shall require. And the President only shall have power to give Leave of Absence for more than one Day, unless he himself is absent, in which Case his power shall devolve to the next in Authority.

10th. The junior Students shall pay such respect to the Seniors, and all of them to the President, Professors, Fellows and Tutors as the said President &c. shall direct, and under such Penalty's as they shall think proper to prescribe.

11th. The person who punishes shall have power also (if the Accounts are not passed) of remitting the punishment.

12th. If any Dispute should arise concerning the due proportion of punishments, an Appeal shall lie (in this as well as in all other Cases) to the President and Tutors and finally to the Governors of the College agreeable to the Charter.

13th. Obstinacy and Perseverance in all Cases may be punished by Expulsion.

14th. During the Summer Season Morning Prayer shall begin between the Hours of Five and Seven, and in Winter between the Hours of Six and Eight as the President shall appoint in the Evening also at what Hours he thinks proper.

15th. The Steward's Accounts, as also that of the Fines shall be passed Monthly by the President, and Quarterly by the Governors of the College and the fines aforesaid shall be [laid out] in Books which shall be disposed of in the most honorary and public manner at the Quarterly Meetings of the Governors as Rewards to such of the Students as Excell in the Course of their Studies and the propriety of their Conduct, according as the President Fellows Professors and Tutors or the Major part of them shall direct.

IV. Graduation

The Examination of Candidates for the Degree of Bachelor of Arts shall be held publicly in the College Hall about six Weeks before Commencement, by the President, Fellows, Professors and Tutors and such of the Governors as shall please to attend: And such of the said Candidates as appear to be duly qualified (having fulfilled the Conditions prescribed) shall at the Commencement be admitted to the aforesaid Degree; and in three Years more if they have pursued their Studies and have otherwise behaved themselves soberly and decently they shall be further Admitted (upon proper Application) to the Degree of Master of Arts. To neither of which Degrees aforesaid shall any Candidate be admitted without performing the above Conditions except, in Cases of extraordinary Capacity, and by a particular Act of the Governors and President Honoris Causâ.

N. B. The regular Time for taking the Degree of Bachelor of Arts is four Years from the Students entrance; and the Fee for each Degree Forty Shillings including the President's and Clerk's fees.

Lastly. It is to be understood that the greater punishments of Expulsion, Suspension, Degradation, and public Confession be inflicted by the Governors of the College pursuant to the Charter, and that the lesser punishments herein mentioned be inflicted by the President, Fellows, Professors and Tutors, or any of them according to the True intent and meaning of these Laws.

APPENDIX C

CONSPECTUS OF "NEW CURRICULUM, TO GO INTO EFFECT JULY 1, 1897"

The curriculum requires an elementary knowledge of *both* French and German of all candidates for the degree of Bachelor of Arts. In the case of students who offer Greek at entrance, one modern language is required for admission, and a five-hour course in the second modern language is prescribed during the Freshman year. Students are encouraged to offer both modern languages at entrance, as they will then be relieved of the obligation to pursue a modern language during the Freshman year, and the time thus gained may be devoted to elective studies.

Students who do not offer Greek at entrance must offer both French and German, and are thus relieved of the obligation to pursue one of those studies in College. On the other hand, they must take in rhetoric, a five-hour course during the Freshman year.

But one alternative for Greek is allowed, namely, advanced mathematics, natural science, and a second modern language.

All candidates for admission to the Freshman class must pass satisfactory examinations in the following subjects: —

ENGLISH, LATIN, and MATHEMATICS,

and also in one of the following groups of subjects:

I { Greek, French	II { Greek, German	III { Advanced Mathematics, French, German, A Natural Science with Laboratory Work	{ Chemistry, Physics, or Botany

Students are designated in accordance with the subjects they present at entrance, as follows: —

Group I. Offering Greek and French.
Group II. Offering Greek and German.
Group III. Offering advanced mathematics, natural science, French and German.

One approved course, covering a year, in a Natural Science including laboratory work, must be taken by every candidate for the degree either before entrance or while in College. The entrance requirement in Natural Science satisfies this condition. Laboratory hours are counted for one-half the number of hours actually occupied.

GROUP I — *Students entering on Greek and French*

Freshman Year

Prescribed (12 hours): Latin A or B, or Greek B; German A; Mathematics A; Rhetoric A.

Elective (3 hours): French I; History I; Either Latin A or B or Greek B, — *i.e.* Latin, if the student has taken Greek as his prescribed ancient language, or *vice versa;* Chemistry I; Physics I.

Sophomore Year

Prescribed (7 hours): History A; Rhetoric B; one of the following: Botany I, Chemistry I, III, IV, Physics I, II, Zoölogy II.

Elective (9 hours): A Sophomore may take courses designated as open to him in the several departmental statements.

GROUP II — *Students entering on Greek and German*

Freshman Year

Prescribed (12 hours): As in Group I, except that French A is substituted for German A.

Elective (3 hours): As in Group I, except that German I is substituted for French I.

Sophomore Year

Prescribed (7 hours): As in Group I.

Elective (9 hours): As in Group I.

GROUP III — *Students entering on advanced Mathematics, natural science, French and German*

Freshman Year

Prescribed (6 hours): Latin A or B; Rhetoric A.[1]

Elective (9 hours): As in Group I, with the substitution of Greek A for Greek B, and with the addition of Chemistry III, IV, German I, Mathematics I, II, Mechanical Engineering I, and Physics II.

Sophomore Year

Prescribed (4 hours): History A; Rhetoric B.

Elective (12 hours): As in Group I.

Junior Year — ALL GROUPS

Prescribed (3 hours): Philosophy A (first half-year); Political Economy A (second half-year).

Elective (12 hours): A Junior may elect courses designated as open to him in the several departmental statements.

Senior Year

A senior is required to take fifteen hours a week of elective courses, and may elect courses designated as open to him in the several departmental statements. If he became a student in the College not later than the beginning of his Junior year, the first year courses in the College of Physicians and Surgeons, the School of Law, and the Schools of Applied Science are open to him, and he may, should he so desire, prepare himself for advanced standing in such schools by electing the first year course in the school selected, in whole or in part, and counting it for the degree of Bachelor of Arts: he may also take subjects of the second year in the Schools of Applied Science, for which he may be qualified.

By a judicious arrangement of his course, a student may qualify himself to enter the second year in the College of Physicians and Surgeons or the School of Law, or the third year in one of the Schools of Applied Science, at the completion of his collegiate course for the degree of Bachelor of Arts.

[1] Rhetoric A for this class of students will be a five-hour course counting as three hours, unless the student elects Greek A.

The foregoing was modified, beginning with July 1, 1900, as indicated below: —

Every candidate for admission to the Freshman class is required at the entrance examinations to offer subjects amounting to fifteen points[1] as indicated below.

The candidate *must* offer

English	counting 3 points
Elementary Mathematics	counting 3 points

The candidate may offer any of the following subjects without other restriction than that to offer an advanced subject will involve offering the corresponding elementary subject as well: —

	Counting in points
Elementary Latin	4
Elementary Greek	3
Elementary History	1
Advanced Latin	1
Advanced Greek	1
Advanced French	1
Advanced German	1
Advanced History	1
Advanced Mathematics	1
Advanced Physics	1

The candidate may offer not more than 4 points in all from the three subjects following: —

Elementary French	2
Elementary German	2
Spanish	2

The candidate may offer not more than 2 points in all from the five subjects following: —

Elementary Physics	1
Chemistry	1
Botany	1
Physiography	1
Zoölogy	1

[1] The several subjects are stated in terms of units; the unit is a course of five periods weekly throughout an academic year of the preparatory school; the subjects are assigned units in accordance with the time required to prepare adequately upon them for college entrance.

COURSE OF STUDY

Candidates for the degree of Bachelor of Arts are required to present courses making a total of sixty points, each point having the value of a subject pursued one hour a week for one academic year, except that laboratory or drawing-academy hours shall be counted for one-half of the number of hours actually occupied. Not less than twelve, nor more than eighteen, points may be presented in any one year without the consent of the Dean. No one-hour course, unless taken in connection with and as a supplement to a cognate course, will be allowed. To the end of his Junior year, a student must always pursue not fewer than three courses having a value of at least three points each.

The courses necessary to meet the above requirement may be chosen by the student at will from the courses announced each year, subject to the restrictions named in connection with each course, and to the following general restrictions: —

PRESCRIBED

For all students:

Rhetoric **A**, 3 hours — Freshman year.
Rhetoric **B**, 2 hours — Sophomore year.
Psychology **A**, 3 hours — First half Junior year.
Political Economy **A**, 3 hours — Second half Junior year.

PRESCRIBED

For students who do not offer Latin at entrance:

Latin **X**, 5 hours — Freshman year.
Latin **Y**, 3 hours — Sophomore year.
Latin **Z**, 3 hours — Junior year.

PRESCRIBED

For students who do not offer the following subjects at entrance, the courses appearing in connection with them respectively: —

French:

Course — French **A**, 3 hours — Freshman year — unless French **1** be chosen.

German:

Course — German A, 3 hours — Freshman year — unless German 1 be chosen.

A Natural Science:

Course — Botany 1, 3 hours — Freshman, Sophomore, or Junior Year, or

Course — Chemistry 1, 4 hours — Freshman, Sophomore, or Junior year, or

Course — Physics 1, 3 hours — Freshman, Sophomore, or Junior year.

Advanced Mathematics:

Course — Mathematics A, 3 hours — Freshman year.

Advanced History:

Course — History A, 3 hours — Freshman or Sophomore year.

Freshmen are required to be in attendance at the Gymnasium on Monday and Wednesday at 11.30; Sophomores, at 12.30.

The Dean and the head of the department concerned may permit any study prescribed for the degree of Bachelor of Arts to be taken as an elective in an earlier year than that for which it is set down.

Elective courses are offered subject to withdrawal if elected by fewer than three students.

APPENDIX D

THE GREEK LETTER FRATERNITIES

NOW AT COLUMBIA UNIVERSITY, WITH THE DATES OF THE FOUNDATION OF EACH CHAPTER

	Established
Alpha Delta Phi	1836
Alpha Delta Phi Reëstablished	1881
Psi Upsilon	1842
Delta Phi	1843
Delta Psi	1847
Phi Gamma Delta	1860
Phi Beta Kappa (Honorary)	1869
Phi Kappa Psi	1870
Delta Kappa Epsilon	1874
Zeta Psi	1878
Beta Theta Pi	1881
Delta Tau Delta	1882
Delta Tau Delta Reëstablished	1902
Theta Delta Chi	1883
Alpha Tau Omega	1883
Phi Delta Theta	1884
Delta Upsilon	1885
Sigma Chi	1894
Sigma Alpha Epsilon	1895
Phi Sigma Kappa	1897
Alpha Chi Rho	1900
Sigma Xi (Honorary)	1902
Tau Beta Pi (Honorary)	1903

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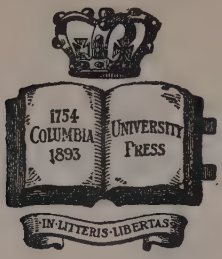

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